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OMNIBUS WATER RESOURCES LEGISLATION

HEARINGS

BEFORE THE

SUBCOMMITTEE ON WATER RESOURCES

OF THE

COMMITTEE ON
ENVIRONMENT AND PUBLIC WORKS
UNITED STATES SENATE

NINETY-EIGHTH CONGRESS

FIRST SESSION

ON

PENDING WATER RESOURCES LEGISLATION

APRIL 22; MAY 17, 18; AND JUNE 15, 1983

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OMNIBUS WATER RESOURCES LEGISLATION

FRIDAY, APRIL 22, 1983

U.S. Senate,
Committee on Environment and Public Works,
Subcommittee on Water Resources,
Washington, D.C.

The subcommittee met at 10:05 a.m., in room SD-406, Dirksen Senate Office Building, Hon. James Abdnor (chairman of the subcommittee) presiding.

Present: Senators Abdnor and Moynihan.

OPENING STATEMENT OF HON. JAMES ABDNOR, U.S. SENATOR FROM THE STATE OF SOUTH DAKOTA

Senator Abdnor. The Subcommittee on Water Resources will come to order.

Today, this subcommittee begins the difficult task of examining the Nation's water resource needs and those budgetary issues which have stood as impediments to further development.

I think we must begin by understanding that the projects which are proposed for authorization in this bill are intended to address fundamental national needs: 46 of the 101 projects in this bill are primarily to prevent damage and protect lives from the threat of flood; 32 projects address the needs of our ports and inland waterways whose operations benefit the Nation by providing efficient transportation for commercial cargo; 7 projects would add annually nearly 1,000 megawatt hours of the purest energy in the world—hydroelectric power—to the Nation's capacity, thereby making us that much less dependent on imported sources of fuel for the future. We may not be in an energy crisis today, but the development of hydropower is insurance for the future.

All of the projects in this bill have completed the corps planning and review process, and I believe they can be assumed to be acceptable projects in the absence of opposition to development from organized local interests or sponsoring groups.

We are here today primarily to hear from those who represent interests which oppose the authorization of projects as contained in S. 947. I recognize that some interests may not have had adequate time to respond to the committee's request for testimony.

Should future requests to testify personally in opposition to projects warrant action, an additional hearing for that purpose can be arranged. Written testimony for the record, whether opposing or promoting a project, is most welcome. On the 17th and 18th of May, the Subcommittee on Water Resources will hold hearings on user fees and cost-sharing policy for water resources.

I want to call on my colleague and friend, Senator Moynihan, who has always been an active leader in water development.

Senator Moynihan, do you have an opening statement?

Senator MOYNIHAN. I thank my friend and chairman and with some temerity, I beg to differ with him.

I have not been a leader in water development before, Mr. Chairman. I have been on this committee 7 years and in 7 years, there has been no water development coming out of the committee.

Senator ABDNOR. I stand corrected.

Senator MOYNIHAN. I have called attention to that fact, I think, and I would do so at the risk of being tedious once again. First congratulating you that there is nothing fainthearted in your enterprises, although how successful it will be, I don't know.

If the Water Resources Development Act of 1983 should actually pass, it would be the first such bill passed since 1970. That is the last time an actual construction project was begun.

In 1974 and 1976, some advance engineering and design was authorized. But water development in America has stopped. The decade of the 1970's came and went and nothing happened. This committee couldn't do it, Congress and successive administrations couldn't do it.

Mr. Gianelli is here today saying they won't do it.

The Corps of Engineers has construction programs in Saudi Arabia. As I understand it, the corps construction projects in Saudi, next year, is twice its construction budget in the United States of America.

The Corps of Engineers is wandering around the world looking for a country that can use it since its own country doesn't have any use for it.

There are reasons for this. The traditional constituency for water projects has diminished. It is obvious that opportunities have been had. We did a lot of good things, as in the case of hydroelectric.

The Nation's water needs have changed and the central and northeastern part of the country has begun to realize that if they don't participate in these programs, they just pay for them.

Successive administrations have been trying to get the people who benefit from projects to pay for them and they don't like that. Enterprises such as the Tennessee-Tombigbee come to mind. Perhaps, Mr. Chairman, we still have an early 19th century congressional system for going ahead with water projects.

I am delighted to know that in this bill, the U.S. Congress is going to put up $2 million for the Cazenovia Creek flood project in my State. Cazenovia is a beautiful little town south of Syracuse and there must be a creek there, although I never remember seeing it, the lake, but the idea of Congress passing a law for a $2 million development on a creek is why we don't pass the laws.

The highway program, which this committee deals with; we simply put up the money and the Federal Highway Administration decides where to build, under the general plan that we authorize. We don't follow it through mile by mile.

EPA, we put out the money and the administrators decide what to do under the law. The practice of going item by item is a very old one and really permits some examination.

I thank you for the opportunity to speak and I welcome Mr. Gianelli.

Senator **Abdnor**. Thank you, Senator.

I might add, that we do not necessarily have to earmark how the corps is going to spend that money, the Appropriations Committee could conceivably do that.

Before we get into project opponents, which the hearing was called for, we want to go into title I of S. 947, which would place ceilings on the annual appropriation for corps construction activities in each of the next 5 fiscal years. I have invited the Assistant Secretary of the Army for Civil Works, Mr. William Gianelli, to give the committee his views on this aspect of the bill.

I believe it is also appropriate to begin these hearings on water resource development issues with Mr. Gianelli, who serves as the administration's policy officer for the Corps of Engineers and is chairman of the Cabinet working group on water resources.

We certainly welcome you, Mr. Gianelli, to the committee and you may proceed.

STATEMENT OF WILLIAM R. GIANELLI, ASSISTANT SECRETARY OF THE ARMY (CIVIL WORKS), ACCOMPANIED BY BRIGADIER GENERAL EDGAR, DEPUTY DIRECTOR, CIVIL WORKS

Mr. **Gianelli**. Thank you, very much, Mr. Chairman.

I have with me Brigadier General Edgar, who is Deputy Director, Civil Works.

I am pleased to appear before your subcommittee to present testimony on the behalf of the Department of the Army on title I of S. 947.

Title I would place a ceiling on obligations for construction, general, and the flood control and Mississippi River and tributaries (MR&T) accounts.

These obligation ceilings would amount to $1.5 billion in fiscal year 1984 and $1.6 billion for fiscal years 1985 through 1988.

As I understand it, the purpose of these obligation ceilings would be to limit the amount of Federal expenditures for construction, general, and for MR&T by the Corps of Engineers for the next 5 years, notwithstanding the amount of work authorized.

In my testimony today, I would first like to address the concept and usefulness of the obligation ceiling as a management device, and, second, the appropriateness of the ceiling levels proposed in title I of S. 947.

First of all, the matter of obligation ceilings as a management device.

We believe that provision of an obligation ceiling to guide the civil works construction program would be a useful management device. First, it would allow the orderly programing of the construction activity and, in so doing, provide a basis for budgeting planning and advance engineering and design as well.

The concept of a multiyear program as a useful management tool is not new, and indeed such a program was used in the past by the Department of the Army.

The 5-year program, however, ceased to be a useful management device because of the lack of new project authorizations and the major uncertainties regarding the conditions under which new projects may proceed as well as a general uncertainty regarding the priority given the civil works program within the overall programs of the Federal Government.

In addition to allowing orderly project implementation, the obligation ceiling makes it apparent to individual Corps of Engineers offices that projects ultimately must compete with one another for limited budgetary resources.

Consequently, I believe that, at the project planning level, there are desirable results in impressing upon both corps planners and would-be local sponsors the limited availability of Federal financial resources. And I think this is on the point that Senator Moynihan was alluding to a moment ago.

A Federal obligation ceiling, together with the non-Federal cost-sharing and financing requirements, defines the total amount of construction activity that can be supported by a given Federal budget.

The more we move from the historic formulas, whereby the Federal Government contributes virtually all the upfront financing, to increased non-Federal financing, which makes maximum use of the capacity of project beneficiaries to organize project financing, the greater the number of water resource problems that the corps will be able to solve.

By any reasonable indicator, the cost of future sound civil works projects exceeds the available Federal financial resources.

Let me give you an example of that.

I have three different kinds of categories I would like to refer to.

The scheduled balance to complete for active authorized projects being funded under the construction, general, and MR&T accounts totals $10.2 billion.

These are projects basically in the process of going ahead and under construction.

In addition, there are at the Washington level over 154 more projects currently being reviewed for authorization. These projects cost another $10 billion. Further, there are numerous projects in the unscheduled backlog, some of which ultimately may be considered for construction.

Because of the great amount of work which places demands on limited Federal resources, I am gratified by Chairman Stafford's recent introduction of S. 1031, "A bill to authorize an equitable share of costs on projects of the U.S. Corps of Engineers in order to encourage a more orderly development of the Nation's water resources."

I might say this bill is very close to some of the things we have been trying to do from an administration standpoint on a year-by-year basis.

This action by the chairman of the Committee on Environment and Public Works complements the administration's initiatives in the fiscal year 1983 and 1984 budgets to find new financing formulas for water projects. These proposals envisioned initiation of construction on 14 water projects having total construction costs of over $1 billion.

With an obligation ceiling, it is apparent that, to the extent that non-Federal participation can be obtained to finance both ongoing as well as new construction activity supportable by a given Federal budget can be increased.

This bill, in conjunction with S. 1031, Mr. Chairman, has a special appeal because it would create the proper incentives, I believe, to develop sound projects, consistent with the new principles and guidelines, which, on the one hand, are responsive to the local sponsors who will be called upon to share substantially in the costs of any project, and, on the other hand, take into account the limited Federal resources available for water resource development.

A beneficial side project would be a screen device and projects that have minimum visability, they wouldn't stand muster and would be weeded out of the process.

Let me comment on the matter of ceiling on the bill.

The establishment of a multiyear obligation ceiling is a direct means by which the Congress and the President can make clear the priorities attached to Federal water project construction expenditures relative to the other activities of the Federal Government.

A ceiling must take into account not only the demands for water resource development projects but also the magnitude of the other demands for Federal budget outlays. Such a ceiling requires an overall balancing of the various demands for Federal financing from a very broad perspective, and I welcome that.

The annual ceilings set forth in title I of the bill appear to reflect recent appropriations for construction, general and MR&T and the declining trend in recent years from the peak funding level achieved in fiscal year 1980.

The construction, general program has averaged about $1.5 billion annually for the last 5 years, and that for flood control on the Mississippi River and tributaries about $240 million annually.

Consequently, if we were to maintain the level of Federal commitment to water resources construction at approximately those of recent history, a ceiling of about $1.75 billion would be indicated.

This amount, however—I would like to add this very emphatically, does not consider the possibilities for increased non-Federal participation in the financing of new water projects as well as changing Federal budget priorities overall.

The President's fiscal year 1984 budget, on the other hand, has addressed both the possibilities for increased non-Federal participation in financing and the other demands on the Federal budget.

The outyear estimates for construction, general and MR&T, consistent with the President's fiscal year 1984 budget, and the recent jobs bill, are set forth in my detailed statement, which I will submit for the record, but overall, these amounts, Mr. Chairman, are as follows:

The approximately $1.3 billion annual appropriation reflected above is, we believe, an appropriate ceiling for these activities in light of today's budget priorities and increased non-Federal financing opportunities.

This ceiling, which is approximately three-fourths that of the recent past, would permit Federal construction activity to continue at higher levels than at present with reasonable development of increased non-Federal financing.

Two examples based upon our fiscal year 1983–84 new start proposals pending before Congress illustrate the movement which is possible: In the case of flood control, non-Federal financing would increase from approximately 20 to 35 percent. For municipal and industrial water supply and hydropower all of the allocated costs, these activities which formerly had been financed entirely by the Federal Government.

In conclusion, I want to say, Mr. Chairman, that enactment of legislation providing an obligation ceiling for the Army civil works program along with adoption by the Congress of new cost sharing and financing arrangements is, I believe, most appropriate at this time.

I am gratified that financing arrangements, initially developed by the Department of the Army for its fiscal year 1983–84 new starts and now endorsed by the administration as appropriate for long-term water project financing arrangements, are incorporated into Chairman Stafford's bill, S. 1031. Enactment of title I of S. 947 with the ceilings I have indicated, if done in conjunction with enactment of S. 1031, would provide much needed direction and stability to the Army civil works program as well as appropriate levels of funding.

Thank you, Mr. Chairman.

I and other members of the staff will be happy to answer any questions you and Senator Moynihan have with respect to these general subjects.

Senator **Abdnor**. Thank you, Mr. Gianelli.

I do have a few questions.

First, I want to welcome an old friend of ours back to the committee. I see Alex Sawaiko walked in. It is good to have you here.

We are glad to see you walking around and back to your old job here.

Mr. Gianelli, the Secretary of the Interior has written the Nation's Governors asking for comments on cost sharing and user fees.

Today you spoke favorably of Chairman Stafford's bill and cost-sharing percentages.

Do your comments reflect official administration policy or do you anticipate the administration taking a clearcut position following the receipt of the Governors' comments?

Mr. **Gianelli**. Mr. Chairman, let me report to the result of that survey.

As I recall, we had some, I think a total of 145 comments which were received as a result of the telegram and the notice in the Federal Register as directed by the Cabinet Council and as set out by Secretary Watt.

We had the staff of the Assistant Secretary's group take a look at all of these comments. As a matter of fact, I reviewed them myself and found that in general there was broad support for cost sharing, with some reservation, I would say, with respect to actual amounts that had been suggested before. The Assistant Secretary's group, after they reviewed the comments felt there was nothing that had been sent in that warranted any change in the directions, in which the Cabinet Council was heading with respect to the percentages which they considered before.

You may recall that last spring, the Cabinet Council approved certain percentages for various uses. That information was widely leaked and distributed, and I believe the Cabinet Council will very shortly now be again taking up the issue. It has been my recommendation, as Chairman of the Assistant Secretary's working group that the Cabinet Council re-endorse its actions last year of the proposals for cost sharing, and that information to be forwarded to the President at an early date. I will hope that will happen.

Senator **Abdnor**. Did you have a good return from the Governors in response to your inquiry?

Mr. **Gianelli**. Secretary Watt asked the question, he wrote the Nation's Governors.

Senator **Abdnor**. Was the response good?

Mr. **Gianelli**. As I indicated there were about 145 responses. From the results of all of those comments that came in, at least in the eyes of the Assistant Secretary's group, it didn't warrant any change in what the Cabinet Council adopted last May.

I think the comments were interesting but I don't think they added anything new to what we already knew on the subject.

Senator **Abdnor**. That was the Water Council?

Mr. **Gianelli**. We heard, as I recall, from about 15 Governors and as I recall, only about 5 of them had some specific comments to offer. The rest of them indicated that we would hear at a subsequent date from some of their departments or that they would take the matter under consideration. So I would say the hope that we would get a large input from 50 of the Nation's Governors did not materialize as a result of the effort of Secretary Watt's communications.

I didn't view the information that came in as being of substance to change the recommendations that the Cabinet Council had made here last May on the subject of cost sharing. So we have asked the Cabinet Council again to reinforce their views on the subject and to again forward that information to the President.

Let me add to that, however, because I think it is important that we have just received approval from the Office of Management and Budget, that for the purposes of planning that we can go ahead and assume the same percentages that we assumed in 1983 and 1984 with respect to cost sharing.

You will recall, when I came before your committee before, I indicated that the Army was moving ahead in 1983 and 1984 utilizing certain cost-sharing assumptions. We had contacted certain local sponsors and that was the basis for our submitting these 14 projects that I alluded to earlier. The indication is now from OMB that we can use those same percentages as we go ahead and plan for future years and that is what we will be doing. So I would say the administration, overall, is certainly moving in the direction of the formulas which we previously discussed with you on cost sharing.

Senator **Abdnor**. You think we have had enough data and response back from the States to go ahead and take some action?

Mr. **Gianelli**. I think we have received all we are going to get from them, Mr. Chairman.

Senator **Abdnor**. You don't think that some of them would want to come in and——

Mr. GIANELLI. Let me say this: I would say that when congressional committees hold public hearings on Senator Stafford's bill, which has specific percentages set forth, the committee is going to get different responses from different people on those exact cost sharing formulas. The telegram that Secretary Watt went out did not include the specific percentages. He asked for a general response on the subject of cost sharing. But I believe when your subcommittee holds hearings on the Stafford bill which has specific percentages in it, that you will get some specific responses on the cost sharing described in the legislation.

Senator ABDNOR. I think we will be doing that in May. As long as we are on that subject, let me ask you a question a bit parochial but of great concern to me as we talk about cost sharing.

Recently, there was an article in the Wall Street Journal saying that recognition will be given to the previous commitments in the administration's cost-sharing policy.

Are you aware that South Dakota has already cost shared a half million acres for the Pick Sloan, Missouri Basin program.

Secretary Watt has said that credit will be given for our past contribution to the program.

Can you give that same kind of assurance?

Mr. GIANELLI. Let me comment this way. I believe there is a broader interest than the instance you cite, Mr. Chairman.

There are a number of projects that are going to get caught in the transition. In other words, as I view it, we have a policy now that we have been following for quite a number of years. If we have a new policy that comes in there are going to be a lot of projects that are caught in between. I would expect that perhaps some of the projects in South Dakota, as others, will be caught in the transition.

We will have to deal with those projects on a case-by-case basis and try to do the right thing by the people in terms of any obligations the United States might have made in the past, keeping in mind also the financing problems that I think the Federal Government has at present.

Senator ABDNOR. I realize that. As you say, it may be case by case, because this is almost retroactive. The example I give refers to law. Pick Sloan was put into effect with a certain understanding and a strong commitment that was made by my State in contributing 500,000 acres. I don't think that can ever be forgotten. I appreciate your comments on it.

You endorse S. 1031 with the ceiling concepts of title I of S. 947.

Would it be correct to say that you would endorse S. 947 with cost-sharing provisions added on to it.

Mr. GIANELLI. Let me say this: I think the administration will want to take a look at it and probably develop an administration position. But it is very appealing to me that those two subjects be joined because it seems to me that your proposal, Senator, with a ceiling that might be imposed, together with a cost-sharing formula that is included similar to the one included in Senator Stafford's bill or some modification of that will go a long way toward making sense out of the water program.

I think it follows through, perhaps on what Senator Moynihan was talking about.

In other words, what you would do would be to give the corps a ceiling under which it had to live with respect to the construction of corps projects.

Within that ceiling, to the extent the corps would get additional cost sharing, it would spread that ceiling out over more projects. So, yes, I would say that if you could take the provisions of Senator Stafford's bill and add it to your bill, it would give us in one piece of legislation, perhaps, both elements of the package which I think would be attractive, assuming you could come along with something on navigation. Navigation is not included in Senator Stafford's bill because navigation is being considered under separate legislation such as the bill Senator Moynihan has introduced.

If you take the navigation bill and you take the Stafford bill and you take your bill and put them all together, I think you might develop a package which represents a very great direction for the future for Federal Water Development and from a personal standpoint, I would be enthused about it.

Senator **ABDNOR**. Senator Moynihan?

Senator **MOYNIHAN**. Thank you, very much, Mr. Chairman.

I am glad to see that Mr. Gianelli and the Secretary feels good about something that is going on around here.

Let me ask you a couple of questions, if I may.

As you interpret the multiyear ceilings that are included here; using the $1.5 billion figure for fiscal year 1984, would you anticipate that if you were building a hydroelectric dam somewhere, and it was 100 percent paid for by the county or State, would that be part of your $1.5 billion?

Mr. **GIANELLI**. No; it would not. I am talking only about Federal money.

Let me qualify that by saying I would envision, for example, if it is multipurpose power project, not a single purpose, as you cite, there might be certain Federal funds going into that multipurpose project.

What I think we would try to do, we would try to take the power part of that project and develop some private financing.

Senator **MOYNIHAN**. You are talking about the corps spending $1.5 billion?

Mr. **GIANELLI**. Yes, sir.

Senator **MOYNIHAN**. You say in your testimony that for municipal and industrial water supply, hydropower, the administration has proposed full non-Federal financing.

I admire the drafting. It sounds like you are doing a favor. Gosh, non-Federal financing. What is the present Federal financing portion of municipal water supply?

Mr. **GIANELLI**. Normally, the municipal allocation is supposed to be paid back over the life of the project. But there may be certain pricing restrictions, for example, for reclamation projects that limit the amount.

Senator **MOYNIHAN**. By the Corps of Engineers?

Mr. **GIANELLI**. The corps will recover all of the costs.

Senator **MOYNIHAN**. When was the last time you built a municipal water project?

Mr. GIANELLI. We have not built any single purpose water projects for a long period. But there have been some projects proposed that have a share of municipal use in them.

Senator MOYNIHAN. I mean the multipurpose, by very long time, I think you mean 180 years.

Mr. GIANELLI. I think there are some recent projects—I would be glad to supply you with a tabulation of those we have supplied municipal waters as part of a multipurpose project for municipal purposes. (See p. 13.)

Senator MOYNIHAN. Let me ask you two other things.

What is the economic rationale of requiring 100 percent non-Federal payment for industrial water and only 35 percent for agricultural water?

Mr. GIANELLI. By and large, I think the reasoning is that industrial water as well as municipal water is a product which could be marketed and could be developed by a non-Federal source.

Most municipal water supplies are developed by cities and water companies who have funded them because there is a vendible product.

When the Federal Government sells municipal water supply to a city, generally there can be a contractual relationship which allows that to be a vendible project.

In the case of irrigation, there often is a limit on what agriculture can afford to pay and, therefore, very frequently it is not possible for irrigation users to pay the full allocated share.

Senator MOYNIHAN. All those poor folks in the Imperial Valley.

Mr. GIANELLI. Let me say that as a minimum and I think if you take a look at what came out of the Cabinet Council, I think the theory was that 35 percent was a minimum amount, where there are irrigation users that had an ability to pay a larger part of that, there would be an effort made to recover more than the 35 percent.

Senator MOYNIHAN. I ask for the corps to present us economic rationale. You say that agriculture is different in policy.

What is based in economic analysis or political analysis or social analysis?

Mr. GIANELLI. I think it is based on the ability to pay.

Senator MOYNIHAN. Will you give us information to that effect?

Mr. GIANELLI. We will be glad to supply you with what we have. (See p. 17.)

Senator MOYNIHAN. Two other things: Is the burden of reclamation circulating queries about cost sharing?

Mr. GIANELLI. Their projects are different from the corps projects and they have been moving in this direction. I don't think they have been following the exact formulas as the corps has been following.

Senator MOYNIHAN. Will the Cabinet Council on Water Resources consider whether there should be a parallel policy?

Mr. GIANELLI. Yes.

Senator MOYNIHAN. I bet you don't come up with one.

Mr. GIANELLI. If the Cabinet Council approves it, it will apply to all the Federal agencies.

Senator MOYNIHAN. But they won't approve it. Reclamation is different, it is for the family farm in the Imperial Valley.

The central Arizona project, a third of it is from municipal water supply, will you require 100 percent funding for that?

Mr. GIANELLI. That is a Bureau of Reclamation project and you probably ought to ask them.

Senator MOYNIHAN. One other thing: I really am worried about this and I would like to ask General Edgar, if I may, could you give us an actual accounting of the dollar levels and some project descriptions of what you are doing in Saudi Arabia and compare it with what you are doing here?

General EDGAR. I can provide it for the record.

Senator MOYNIHAN. Let me say this to you and make it be very clear.

It doesn't bother me one bit what you are doing there; it is what you are not doing here that is bothering me.

General EDGAR. I understand, sir.

Senator MOYNIHAN. You train your people and someone gives you a chance to do something you have never done before, which is to build a city in the abandoned quarter, or whatever; it couldn't be done before and it's a challenge, so you say let's do it. More power to you. But, don't forget us. Come home.

Mr. GIANELLI. That work over there is 100 percent reimbursable by the Saudi Arabians.

Senator MOYNIHAN. Of course it is. I know that. I don't have the least objection to you doing it. It is what you are not doing here that bothers me.

Excuse me, I have to go to another hearing.

General EDGAR. I will provide that for the record. (See p. 18.)

Senator ABDNOR. Thank you.

One last question I would like to ask for the record, Mr. Gianelli.

If I understand your discussion of the annual ceilings correctly, you would propose an annual ceiling of $1.3 billion for construction activity. Each year except for the fiscal year 1984 when you will propose a $1.1 billion ceiling; is that correct?

Mr. GIANELLI. We have already submitted our 1984 budget and I think the figure you reflected is correct. That represents quite a downhill slide as far as the corps budget is concerned.

I think the other figure that we suggested to you is one that we felt would be an appropriate ceiling, if you look, for example, at the out years.

Senator ABDNOR. How much funding will be available for new starts in each of the years at those levels?

Mr. GIANELLI. I don't have that information handy. We can try and provide you with that, Senator. You mean within the ceiling that we have talked about how much new construction.

Senator ABDNOR. How much new construction?

Mr. GIANELLI. Let me quickly say we will try to supply you with some information on that, but part of that will depend on how many people we can get to cost-share these projects.

In other words, we can start a lot more construction if we can develop some of our new cost-sharing formulas than if we have to fund these projects 100 percent by the Federal Government. We can start a lot more construction projects under a cost-sharing arrangement.

Senator **Abdnor**. Mr. Gianelli, I want to say we don't always agree with you on every policy issue but I want you to know we have the utmost respect for your views as one of the Nation's experts on water resources development, and we do appreciate it. I want to take this opportunity to thank you for appearing here today and I am interested in discussing the cost-sharing issue in much more detail, which I am sure we will be doing in the near future.

At this time, we extend to you an invitation to address the subcommittee on that subject sometime in May and we will be getting back to you.

Mr. **Gianelli**. Thank you.

Senator **Abdnor**. Thank you Mr. Gianelli and General Edgar.

[Additional information supplied by the corps follows:]

31 Jan 1983

Operational Corps Projects with M&I Water Supply Storage

Div	District	Project, State
NED	-	Colebrook, CT
		East Brimfield, MA
		Littleville, MA
NAD	Philadelphia	Beltzville, PA
		Blue Marsh, PA
	Baltimore	Bloomington, MD & WV
SAD	Wilmington	*B. Everett Jordan, NC
		W. Kerr Scott, NC
	Savannah	Clarks Hill, GA&SC 1/ 2/
		Hartwell, GA&SC 1/ 2/
	Mobile	Allatoona, GA 1/
		Okatibbee, MS
MRD	Omaha	Bowman-Haley, ND
	Kansas City	Clinton, KS
		Hillsdale, KS
		Long Branch, MO
		Milford, KS
		Perry, KS
		Pomona, KS
		Smithville, MO
NCD		(none)
ORD	Huntsville	Alum Creek, OH
		John W. Flannagan, VA
		North Fork of Pound, VA
		*Paint Creek, OH
		Tom Jenkins, OH
	Louisville	Barren River, KY
		Brookville, IN
		Caesar Creek, OH
		Green River, KY
		Harsha, OH
		Monroe, IN
		Patoka, IN
		Rough River, KY
	Pittsburgh	Berlin, OH
		Michael J. Kerwan, OH
		Mosquito, OH
LMVD	St. Louis	Carlyle, IL
		Shelbyville, IL
		Rend, IL
	Vicksburg	*DeGray, AR 1/

Div	District	Project, State
SWD	Little Rock	Beaver, AR 1/
		*DeQueen, AR
		Dierks, AR
		Gillham, AR
		Greers Ferry, AR 1/
		Millwood, AR
		Nimrod, AR
		Norfolk, AR 1/
	Ft Worth	Bardwell, TX
		B. A. Steinhagen, TX
		Belton, TX
		Benbrook, TX
		Canyon, TX
		Granger, TX
		Grapeville, TX
		Hords Creek, TX
		Lake Georgetown, TX
		Lake O'The Pines, TX
		Lavon, TX
		Lewisville, TX
		Navarro Mills, TX
		O.C. Fisher, TX
		Proctor, TX
		Sam Rayburn, TX 1/ 2/
		Somerville, TX
		Stillhouse Hollow, TX
		Waco, TX
		Whitney, TX 1/ 2/
		Wright Patman, TX
	Tulsa	*Birch, OK
		*Broken Bow, OK 1/
		Canton, OK
		Clayton, OK
		Council Grove, KS
		Denison, OK&TX 1/
		El Dorado, KS
		Elk City, KS
		Eufaula, OK 1/
		Fort Supply, OK
		Heyburn, OK
		Hugo, OK
		Hulah, OK
		John Redmon, KS
		Kaw, OK
		Keystone, OK 1/
		Marion, KS
		Oologah, OK
		*Optima, OK
		Pat Mayse, TX
		Pearson-Skubitz, KS
		Pine Creek, OK

Div	District	Project, State
	Tulsa	Tenkiller Ferry, OK 1/ 2/
		Toronto, KS
		Waurika, OK
		Wister, OK
NPD	Seattle	Wynoochee, WA 1/ 3/
	Portland	Lost Creek, OR 1/

Footnotes:

1/ Listed on power sheets
2/ Powersheets do not have costs assigned to water supply.
3/ Powersheets do not have costs assigned to power.
* No storage under contract.

Inventory of Municipal and Industrial Water Supply Under Construction

Dist	Project, State User	Estimated Date For Plant-In-Service	W.S. Storage (acre-feet)	W.S. Investment Cost ($000) 1/
SAW	Falls Lake, NC			
	City of Raleigh	6/84	45,000	12,908.0
SAJ	Cerrillos, PR			
	Commonwealth of PR	12/87	25,200	64,422.0
NCR	Saylorville, IA			
	State of Iowa	7/84	14,900	4,811.6
ORP	Stonewall Jackson, WV			
	NUC 2/	3/87	2,200	4,300.0
LMS	Cannon, MO			
	NUC	3/84	20,000	13,000.0
SWF	Aquilla, TX			
	Brazos River Auth.	7/83	33,600	12,573.0
SWF	Cooper, TX			
	N. TX, Mun. Water Dist.	7/89	100,625	24,975.0
	Sulphur R. M.W.D.		71,750	17,800.0
	City of Irving		100,625	24,907.0
SWF	Lakeview, TX (now Joe Pool)			
	Trinity R. Auth.	3/86	142,900	52,711.0
SWF	Ray Roberts, TX (formerly Aubrey)			
	City of Dallas	9/86	685,809	125,937.0
	City of Denton		240,971	44,248.0
SWT	Arcadia, OK			
	Edmon P.W.A.	3/86	23,090	28,680.0
SWT	Candy, OK			
	Okla. Water Cons. Storage Commission	Not Scheduled	41,460	8,353.0
SWT	Copan, OK			
	Copan P.W.A.	4/83	5,200	4,301.0
	NUC		2,500	2,174.9
SWT	Skiatook, OK			
	Washington County P.W.A.	10/84	2,060	412.0
	NUC		62,540	12,734.0
SPN	Warm Springs, CA			
	Sonoma County	4/84	212,000	96,624.9

Footnotes: 1/ Price Level Varies 2/ Not Under Contract

RATIONALE FOR PROPOSED AGRICULTURAL WATER COST SHARING PERCENTAGE

The standard repayment formula for irrigation investment in Federal Reclamation projects was established in the Reclamation Project Act of 1939.

This formula provides for repayment, within 40 years, of the irrigation investment in annual installments. This repayment is without interest. In addition, a development period of up to 10 years may be allowed, in which payment of the installments is deferred. This formula, along with other repayment provisions, was enacted, in the language of the statute, for the purpose of providing for United States reclamation projects a feasible and comprehensive plan for the economical and equitable treatment of payment problems. Previous repayment formulas had been found, in general, to be beyond the ability of many irrigation beneficiaries to pay.

The effect of not charging interest, and allowing up to ten years' deferral of payments is equivalent to charging 11 to 24% of full costs at the current repayment interest rate set by the Water Supply Act of 1958, depending on the period of deferral allowed. These percentages of full recovery are roughly the same as the portion of total first costs borne by non-Federal interests for local protection flood control projects in providing lands, easements, and rights of way (long-term average, 20%).

The percentage of costs specified in S.1031 represents an increase in non-Federal cost sharing for water projects over previous levels. The amount proposed for flood control is 35%. Since agricultural flood contraol, drainage, and irrigation all have the same primary purpose — increasing net income from crop production — and, in fact, modern agricultural water management in many areas physically combines all three, it seems appropriate to set the cost-sharing percentage for agricultural water at 35% also.

COMPARISON OF SAUDI ARABIA WORKLOAD AND CORPS CIVIL WORKS CONSTRUCTION PROGRAM

	$ MILLION		
	1982	1983	1984
Saudi Arabia Workload Engineering and Construction	1,695.3	1,911.7	1,628

At present, there is some $21.7 billion of U. S. Government approved construction in the planning, design and actual construction stages, although not all of this has been approved by the Saudi Arabian Government. It is anticipated that about $15 billion will eventually be funded for our construction. Construction consists of office buildings, bachelor and family housing, airfield pavements with related operational and maintenance facilities, schools, and related utilities including power plants, water wells, desalinization plants, water storage facilities, sewer lines, and treatment plants. The work is spread all over the Kingdom. The program is expected to run into the late 1980's.

	1982	1983	1984
Civil Works Construction Program Engineering and Construction	1,609.6	1,602.4	1,101.7

The ongoing civil works program includes design and construction of water resources projects for navigation, flood control and beach erosion control. The 1982 program completed 22 projects and continued 212 projects. In 1983, 27 projects will be completed, 186 continued, and 8 have been initiated. The 1984 schedule will complete 12 projects, continue 161 projects and initiate 5 projects.

Added Information Provided

With proposed ceiling of $1.1 billion in FY 1984, approximately $35 million would be available for new starts of regular projects. With a ceiling of $1.3 billion, approximately $66 million, $136 million, $157 million, and $200 million would be available in FY 1985, 86, 87, and 88, respectively for regular project new starts initiated in 1984 and after.

SANTA ANA FLOOD CONTROL PROJECT, CALIF.

Senator **Abdnor**. We are going to have a panel of witnesses on the Santa Ana flood control project in California.

I will ask them to come forward.

Mr. Townsend, Mr. Karabatsos, and Mr. Osborne.

Some of you are acquainted with Congressman Lewis, who planned to be here but our schedule conflicted with his so he will submit a statement for the record.

I am sure his views coincide with yours. We have great respect for Congressman Lewis. I served with him on the House Public Works Committee.

Do you all have testimony?

Mr. **Karabatsos**. I am representing the County of Riverside Flood Control District. I believe you have a letter from Walt Abraham, the chairman of our board of supervisors.

STATEMENT OF ROBERT O. TOWNSEND, SUPERVISOR, SAN BERNARDINO COUNTY

Mr. **Townsend**. I am Robert Townsend, member of the board of supervisors, supervisor, fourth district, San Bernardino County.

I submitted a document that looks like this that I would invite your attention to.

I will try to keep my comments brief to you.

Senator **Abdnor**. Your written testimony will be made a part of the record, so you can proceed.

Mr. **Townsend**. Once again I thank you for the opportunity to testify before your committee. Some of the testimony that is in this packet has been given to earlier committees.

The cover page, Senator, shares the project in a very small scale of the project with a lower left blue area, the flooding area in Orange County, the red line would be the channel improvement through Orange County, the somewhat red lopsided circle is the Prado Reservoir and the expansion of the Prado Reservoir is as proposed in all river plans.

The blue area is the flooding area in Riverside and San Bernardino County, which goes up to the large circle, where the Mentone Dam is, as proposed in the all river plan.

We proceeded through this document, the first written page is my letter to you.

I would just say that the next to the last paragraph indicates the full support of Orange, Riverside, and San Bernardino Counties and the revised language for authorization by all three boards.

Turning the pages in this particular document, we have another overlay here that shows basically Riverside and San Bernardino County, the flood control project between Mentone, the watershed of Mentone proposed down through the Riverside County into Prado.

I think it needs to be said that Prado Dam itself is located in the County of Riverside. The lake, the water that is there now is in Riverside and San Bernardino County, San Bernardino County on the northerly portion and Riverside County on the easterly and northerly sections.

If you turn the pages again, the next overlay shares the flood plain, the flooding area in San Bernardino County of which the Mentone Dam, as proposed, would protect.

The light blue is the standard project flood damage which includes the Norton Air Force Base.

The dark blue is the 100-year storm, which would be contained in an improved channel. Some of the proposals and alternatives to the Mentone dams are dams to be located upstream of Mentone back in the hills which would provide the flood protections and also provide some substantial quantities of potable water for use by the water districts.

Turning the page again is the testimony that was given basically to your committee earlier this year.

I would invite your attention to page 2 of that, down toward the lower portion of the page, in fact the third paragraph from the bottom.

Let me just read:

> One obvious solution would be the increase the height of Prado Dam to provide the needed storage. Taking additional land at Prado for flood storage to protect lands in Orange County is clearly the issue which became the paramount concern of the Santa Ana River study.

This is a subject that is very damaging to San Bernardino as well as Riverside County if that would be the case. I further go on to state:

> The residents around the Prado Reservoir are particularly concerned that area remaining is one of the few open agricultural areas in close proximity to the Los Angeles metropolitan area. Maintaining the rural atmosphere of the Prado area has high priority for these particular residents.

Riverside County, San Bernardino County would very strenuously oppose the taking of lands in the Prado area in excess of the 566 elevation mark that is proposed in the all river plan.

Moving along in this prepared presentation, following the yellow pages, the first attachment is a resolution from our board. Once, again, I invite your attention to the, "Now, therefore, be it resolved," and this large paragraph which is the wording that all three counties have supported for authorization language in your bill and it mainly spells out what I have highlighted previously.

Senator **Abdnor**. What page are you on?

Mr. **Townsend**. I am on the first white page following the yellow page.

"Now, therefore, be it resolved:" And then the large paragraph. It starts with:

> The project for flood protection for the Santa Ana River, California, is hereby authorized for construction substantially in accordance with the Chief of Engineer's Report, dated 15 January 1982, including reservoir storage in the Upper Santa Ana River Basin, except that constructions at this time is restricted to the following elements of the project.
>
> Improvements at Prado Dam, which limit the reservoir taking line to no greater than an elevation of 566; Santa Ana River Channel improvements in Orange County; improvements along Santiago Creek; improvements of the Oak Street Drain; improvements of Mill Creek levies; features for mitigation of the project effects and the preservation of endangered species, and recreation features which are identified in the Chief Engineer's report for these project elements.
>
> Flood protective measures other than those cited above will be undertaken only after issues relating to the reservoir storage in the Upper Santa Ana River Basin

have been addressed by the Corps of Engineers and agreed to by the resolution of the local sponsoring agencies.

The next page, Mr. Chairman, is a letter from Colonel Taylor of the Los Angeles District Office of the Corps of Engineers to the chairman of the board of supervisors, Hon. Cal McElwain and he outlines what his intent is for providing with this type of authorization language.

If you would like for me to proceed, I will, but it is there for your review.

Senator **Abdnor**. Does anybody have a statement they want to make? Or is it pretty well contained?

Do you have additional comments you would care to make?

STATEMENT OF K. T. KARABATSOS, REPRESENTING THE COUNTY OF RIVERSIDE FLOOD CONTROL DISTRICT

Mr. **Karabatsos**. We have the joint statement of Riverside County and Riverside Flood Control District regarding this project which we want to make part of the record.

Senator **Abdnor**. Fine. Both of you gentlemen have come a long way and I don't want to shortchange you on time. I assure you your statement will go into the record. (See p. 59.)

Mr. Osborne?

Mr. **Osborne**. I would like an opportunity, Mr. Chairman, to highlight my statement, if I may.

Senator **Abdnor**. Go right ahead.

STATEMENT OF GEORGE OSBORNE, EXECUTIVE DIRECTOR, SANTA ANA RIVER FLOOD PROTECTION AGENCY

Mr. **Osborne**. I represent the County of Orange and 18 cities on the flood plain of Santa Ana River and we do thank you for introducing this bill and we do support it and we do recommend that in further development of the bill that you include these items that have been brought up by San Bernardino County and supported by Riverside County.

I would like to say a few words on cost sharing, if I may.

Mr. McConnel, could you put up the blue exhibit there?

Orange County does have a long record of supporting cost sharing of Federal projects and has no objection to cost sharing on the channel work through Orange County in whatever formula the Congress and the administration finally decide upon.

We do think that we have a rather unique situation with Prado Dam and Reservoir. This Prado Dam would be just outside of this exhibit. The light blue is the area which would be inundated by standard project flood.

This is the area that is going to suffer the $12 billion of damage in Orange County.

This dam was constructed by the Corps of Engineers in 1941 and was designed to contain a 200-year flood. We learned later that the dam was insufficient to contain a 200-year flood.

The Corps of Engineers had changed the criteria they used in sizing the reservoirs only a few years after completion of this dam, but we had no knowledge of this change. And during those years, from 1950 to 1970, most of the development took place on this area that is covered in light blue.

When you further consider cost sharing in your deliberations, whether by separate bill or by combining the cost-sharing bill with your own bill, we would like you to consider seriously that the remedy of the deficiencies in Prado Dam, should be on the cost-sharing basis for which the original project was built and not ask the local people in Orange County to bear this additional cost.

Senator **ABDNOR**. Then, cost sharing meant the project would go forward much more rapidly, would that be meaningful to you, would that affect your views on cost sharing.

If you could get a more rapid start on this project and early completion, if you entered into a cost-sharing program, would that change your views?

Mr. **OSBORNE**. I think it would.

Senator **ABDNOR**. That is all we wanted to know.

Does anyone else have any additional statements?

There are parts in the project you endorse that you question very seriously. Are some steps such as construction evaluation being taken now?

Mr. **TOWNSEND**. No, the colonel advises us that his budget does not permit him to examine these particular items as he has outlined in the corps. He felt that with the authorization of the project that he could certainly get into these with full rigor to bring it about as rapidly as possible.

Senator **ABDNOR**. I was reading Colonel Taylor's letter of March 23 where he says, "Therefore, I would like to inform you the Corps of Engineers will * * *" and he goes on to list several things. But now that list is based on funding; is that what you are telling us?

Mr. **TOWNSEND**. I believe that is fair.

Senator **ABDNOR**. Do you have any idea what he is talking about in dollars?

Mr. **TOWNSEND**. I have not had the privilege to speak with Colonel Taylor recently, possibly Bob Ingram, my flood controlling engineer.

Mr. **INGRAM**. Senator, the appropriations bill has $2.3 billion in it and my understanding of something in the range of $4 million is necessary to finish up the planning and engineering in this area.

Senator **ABDNOR**. Let me ask you, Mr. Townsend, What happens if the corps finds an alternative to be the best solution, then what?

Mr. **TOWNSEND**. The Montone alternative to be the best solution?

Senator **ABDNOR**. Yes.

Mr. **TOWNSEND**. We have engineers in the area that have examined and explored upstream dams, a variety of those. They indicate to us that there are sufficient tradeoffs to give us the level of protection that Orange County needs and also protection for San Bernardino and Riverside County at a commensurate cost.

Senator **ABDNOR**. Do you have any idea of what the cost of the project is?

Mr. **INGRAM**. Bob Ingram, director of transportation and flood control, San Bernardino County.

Would you ask the question again?

Senator **ABDNOR**. Do you know what the revised cost of the project would be?

Mr. **Ingram**. It is near $1.2 billion of the current all river plan. The revised project would depend on the element that was selected but one of the reservoir storages is considerably smaller, perhaps 70 percent, which I could envision lowering the cost $100 million or something in that range.

Senator **Abdnor**. What is the benefit/cost ratio?

Has anyone given any thought to that?

Mr. **Townsend**. Senator, I believe it is clear to us presently that upstream reservoirs have benefits other than just flood control because it would be harnessing potable type water which could be used in domestic systems or it can be recharged into the underground basin.

Senator **Abdnor**. Gentlemen, I want to thank all of you for coming today. We certainly want to cooperate and work out with you any compromise with representatives like yourself that is the only way we are going to get anything done.

You have come a long way to tell us your story and you did an excellent job. Your testimony is going to be very helpful to us. We appreciate it.

Mr. **Townsend**. Thank you for your time and your interest, Senator.

Senator **Abdnor**. We have a statement from Senator Cranston on the Santa Ana project which will be made a part of the record. (See p. 41.)

Next to testify is the newly elected president of the National Wildlife Federation, Dr. Benjamin Dysart.

Mr. Dysart, we welcome you. We congratulate you on your new office.

STATEMENT OF BENJAMIN DYSART III, PRESIDENT, NATIONAL WILDLIFE FEDERATION, ACCOMPANIED BY EDWARD R. OSANN, DIRECTOR, WATER RESOURCES PROGRAM

Senator **Abdnor**. We have a rule in this committee that we expect the testimony of witnesses 24 hours in advance of the hearing.

I don't mean to pick on you especially. I think that rule is fair so that the staff and the members can have some idea of what to expect in the way of testimony and to formulate questions.

Thank you. You may proceed.

Mr. **Dysart**. Mr. Chairman, we have an extensive written statement which we have just submitted for inclusion in the record but we would like to present a brief statement this morning orally.

My name is Ben Dysart. I am president and chairman of the Board of National Wildlife Federation and appear before the subcommittee this morning in that capacity to testify on the Water Resources Development Act of 1983.

I am accompanied here this morning by Mr. Edward Osann, who is director of the National Wildlife Federation water resources program.

I am familiar with the water resources development business and this is no accident, Mr. Chairman. I have three degrees in the areas of civil, sanitary, and water resources engineering and I am also former director of the water resources engineering graduate program, Clemson University, where I am now, the McQueen Quattlebaum professor of engineering.

For the past 15 years, I have taught grade water courses in the water resources management areas and have been actively involved in advisory and consulting capacities with a host of Federal agencies, including several components of the Army civil works program and other agencies as well as extensive involvement in resource development with the private sector.

I guess it is appropriate these days that you see if anybody has spent any time in the real world and I can assure you, Mr. Chairman, that I have spent a good bit of time with the private industry, Union Carbide, doing engineering, design work.

In 1975 and 1976, I served as science adviser to the First Assistant Secretary of the Army of Civil Works. The federation has over 4.2 million members and supporters and organizations in 51 States and territories. We are the Nation's largest conservation organization and in the past decade, our voting delegates have passed something in excess of 50 resolutions, establishing conservation policy related to water resources for our organization.

The federation and our affiliates have a history of working with State officials and Federal construction agencies in trying to resolve differences relating to policy and projects.

We have commented on scores of projects; we have initiated rulemaking and policy changes; we have negotiated and when all else has failed, we have sought remedy in the courts to enforce environmental planning requirements.

We have committed a lot of resources and time and effort to the initial development and now the defense of the Water Resources Council procedures for planning and evaluation of Federal water projects.

We strongly supported legislative efforts on both appropriations and authorizations to improve and redirect the Federal water development program.

Mr. Chairman, the criticisms of Federal water development in this country are too well known. Too often in the past we have had some projects that were not as economically sound as they should have been and have resulted in causing problems to the environment as well as gouging the taxpayers. I think we can do a lot better and I personally and our organization is confident that the corps can do better also to manage both fiscal and natural resources.

We face today the simultaneous demands of a massive Federal deficit and a lingering recessionary economy. I think the Congress must carefully target public sector investment, limited public sector investment as we all know to increase the productivity of each dollar spent in the resource area and certainly in the water resources area.

In this light, I think the great expertise and the experience and the great tradition of the U.S. Army Corps of Engineers should be viewed as nothing short of a terrific natural resource, a resource that can be prudently managed for the greater welfare of the Nation, our sources and our people or carelessly squandered by mandates, many mandating from this committee or from the Congress.

Being an engineer, I am aware that frequently engineers and engineering approaches to resource development from past decades and past generations have been accused sometimes rightly, sometimes wrongly, of breaking on or exacerbating a lot of the Nation's resource problems, environmental problems.

Again, as an engineer, I am compelled to observe that good engineering as an absolutely necessary part of effectively and responsibly developing our Nation's water resources and in coping with a lot of the problems that we now have.

I guess I would like to say that I am very upbeat about the need for and the role of good engineering and good engineering agencies such as the corps in the water resources development business.

I am proud of the role that my organization has played in recent years in helping to educate the public, the press and perhaps even a little bit the Congress as to the realities and the problems and the shortcomings of water resources projects and policies.

I want to assure you and the entire subcommittee and the full committee that we approach the task of identifying productive new avenues for the corps civil works program with at least equal enthusiasm.

The task facing this committee in your opinion is nothing less than the rebuilding of a national political consensus about a mature and appropriately targeted water resources development program and we hope to do all that we can to help build this consensus.

Much in the way of water development remains to be accomplished by both the private sector and the public sectors. We all know that there are projected to be great problems and shortages of water and water-related products and services.

There is a great deal to do and I think appropriate and effective water resources water development program for the Nation in the future is going to be somewhat different from what we have seen in the past, but it is certainly going to involve a great deal in the way of structural project, structural alternatives as well as innovative technologies and nonstructural aspects.

Mr. Chairman, I am pleased to offer the support of the National Wildlife Federation for the authorization of a multi-billion-dollar package of water resources development projects and plans for the Army Corps of Engineers.

The package that we envision as being appropriate for today and for the future in representing a wise investment of our public investment capital would be a combination that does several things: First, it has got to be a set of responsible development proposals that meet legitimate public needs.

Second, we need across the board water policy reforms incorporating the best recommendations of the Presidential commissions, academic, private sector economists, State officials, and other observers who have been thoughtful participants in this process over the last decade.

Third and finally, I think we need a major overhaul of specific Corps of Engineers programs, such as water supply, to manage the existing Federal investment on a more businesslike basis as well as the future further conserve and protect national resources.

Alternatively, Mr. Chairman, I think that a return to nothing better than the old-fashioned "Pork Barrel" with something for everyone without regard to contrary standards and realistic constraints, economic and otherwise with due consideration with goals and aspirations and concerns of the American people would, I believe, it is not overstating it to say that it would squander a historic opportunity, I admire the Corps civil works program again in controversy and stalemate.

I think we can do better. I think the Nation deserves better and I think the public is going to demand that each of us and you will have the interest groups, the Congress, the agencies do our part in producing a better, more cost-effective product for the people.

When you introduce S. 947, Mr. Chairman, you asked that witnesses identify controversial projects which they oppose.

I think in the absence of adequate attention to needed policy reforms such as cost sharing, cost recovery, wildlife mitigation, maintenance of strict evaluation criteria and the like, you stand a good chance of having all new water resources development proposals be controversial and I don't think will be in the best interest of the Nation, the agencies of any of us.

I think even more important, we are going to have to have proposals that enjoy broad support to get through the organization, implementation faces and also I think the public needs to feel that they can have confidence in the water resources development process.

At this time, I would like to ask Mr. Osann to present a brief summary of specific key reforms and project selections criteria that we at National Wildlife consider to be appropriate.

With your permission.

Mr. **Osann**. Mr. Chairman, I would direct your attention to attachment to our statement this morning, which lays out an array of recommendations for policy revisions for——

Senator **Abdnor**. Well, I wish we would have had your testimony a day ahead of time. But you have been kind enough to come here to testify. Again, I keep getting away, but we are going to insist on that in the future, so we will have the benefit of that.

Mr. Osann, if you can summarize and we would appreciate hearing from you.

Mr. **Osann**. Within the area of policy reforms, that applies across the board, much has been said here this morning and in recent months regarding cost sharing. We would like to make a distinction between cost sharing from same sources and cost sharing from States as State governments.

We feel that a requirement for State cost sharing would go far to achieve the oversight and evaluation and prioritization of projects that the States should bring to this program. In our view States should be required to contribute a minimum share of 10 percent of construction cost for all new water projects in cash and not in kind or being reimbursed on a portion at the basis for any user fees collected by the Secretary of the Army.

As indicated by Dr. Dysart, the Federation has been actively involved for many years in efforts to upgrade a plan evaluation procedures for Federal water projects.

As you know from your work on S. 1095 in the last Congress, Secretary Watt in his capacity as Chairman of the Water Resources Council, has sought to repeal the principles and standards and which were promulgated in 1979 and 1980 and since October 1982, all funds have been cut off for the Water Resources Council. On February 3 of this year, President Reagan approved a repeal of principles and standards as rules effective July 8 of this year and their substitution with weaker and in our view, unenforceable guidelines.

We feel that the loss of principles and standards as binding planning criteria would be a severe blow to the efforts to upgrade the quality of Federal water projects and would result in a more split-seasoned approach to water project evaluation and funding, current budgetary strictures not withstanding. We would encourage the attention of the committee to this problem which it attempted to address in the last Congress, again in the context of this legislation.

As might be expected, fish and wildlife mitigation is also one of our major concerns. In that regard, we are most anxious that equal and timely consideration of wildlife factors along with economic constructual features of the project be given. The National Environmental Policy Act essentially mandates this integration of environmental concerns into the initial planning process and the Fish and Wildlife Coordination Act expresses the same intent.

Even though this is a stated policy of the Congress, the failure to provide clear regulations for the implementation of very general language in the Fish and Wildlife Coordination Act has led to interagency friction and unreasonable delay in the provision of mitigation futures, in our view all mitigation issues should be addressed and reconciled before the authorization of construction of any project.

Similarly, we would offer the committee a selection of function-by-function policy reforms dealing in areas ranging from hydroelectric power to water supply, stream bank erosion control, and the like.

I would like to point out that we have supported and continue to support the concept embodied in your legislation, Mr. Chairman, of deep draft navigation user fees. We may have differed on the specific levels, but we support the concept of port specific fees and would like to do anything that we can to support your efforts in this Congress as well.

Senator ABDNOR. I thank you. We had problems with that bill. We appreciate any encouragement we get.

Mr. OSANN. The last area I would itemize here is one that we would like to call your attention to a major overall and that is the area of beach erosion control. This is a first activity that has been an authorized purpose of the corps for a good number of years but it is now apparent that it is an inescapable fact that sea-level is rising and will probably continue to rise for the foreseeable future. Well over 2,000 miles of coastline are considered by the corps to be in a state of critical erosion. If we build sea walls in a doubled effort so stop that erosion, it would cost anywhere up to $6 billion.

Even just to pump sand on 2,000 miles of disappearing beach will cost $2 billion and would need to be repeated at intervals ranging from 3 to 10 years. We feel that a shoreline policy needs to be established by the Congress to incorporate the latest scientific knowledge and recognizes shoreline retreats as ineffortable and outdates this national phenomena.

Finally, Mr. Chairman, at this time with respect to specific projects, we would like to offer the committee what might be considered a project selection checklist. There are a number of points that we feel are important to be addressed in the review of individual projects contained in S. 947 or other legislation of this type.

First of all, the projects have completed favorable reports from the chief of engineers and final environmental statements filed with EPA. We would commend you, Mr. Chairman, for establishing this as the standard as we understand it, for the inclusion of projects within S. 947.

Second, the project incorporates fish and wildlife mitigation features to the satisfaction of Federal and State wildlife agencies.

Some of the projects that are before the committee in the bill, for example, the big river reservoir project in Rhode Island, there are outstanding policy differences. We would recommend that committee solicit the views in summary form from the Fish and Wildlife Service regarding the resolution of mitigation issues and that if need be, the committee call forward the Fish and Wildlife Service and representatives from the Corps of Engineers, not to debate, but simply to amplify and explain the basis for an outstanding policy dispute in this area with regard to a particular project.

Then the committee would be in a position to make a judgment one way or the other.

These issues are not addressed now, the possibility is that controversy will drag out and it will become a factor in either delaying the implementation of the project or court litigation or other kinds of delays that the committee might obviate with the actions of the kind we suggested.

Third, are flood control projects planned and evaluated in accordance with the revised principles and standards and procedures of 1979 and 1980? I think it is important to point out the reports prepared under the old guidelines for flood control may credit a project for flood damage reduction, or they may simply result from actions unconnected with the project at all, such as the flood plain and wetland Executive order of 1977. The Federal flood insurance program or even local zoning. The resulting benefit cost ratios for projects planned and evaluated prior to 1979 are inflated and they are not really a fair basis for comparison with projects that were planned under newer and tighter rules. We would recommend that reports developed under the old guidelines be returned to the corps for updating and the committee concentrate deliberations on those projects evaluated on a more contrary and conceptually credible basis.

The next point would be to identify whether hydroelectric power projects are depended upon increasing fossil fuel costs for economic feasibility. This need not be a distinguishing criteria Mr. Chairman, but is one that needs to be artfully addressed. In our view, projects that do rely on increasing fossil fuel costs are in effect, analogous to speculation in the future market on oil.

On fossil fuels. Maybe the Congress wants to exercise its judgment in this manner, but in our judgment, it ought explicit rather than implicit or even worse, an unconscious judgment.

The next point would be to ask whether projects are consistent with the most recent and reasonable projections for population growth, electric power demand and water pricing and consumption levels in this regard and Gad Dam is a Parker Lake project. The report to the chief on Parker land in Oklahoma contains no documentation of the need for the water that the project will provide nor any assessment of the availability of Corps of Engineers water supplies within Oklahoma. There is a very substantial amount, as found by the General Accounting Office, of water contained in reservoirs in Oklahoma that is not being used and not under contract. Certainly before the Congress authorizes the expenditure of millions of dollars to increase the storage capacity for municipal water supply in Oklahoma, we would urge the committee to take a look at the current situation with the corps reservoirs that are already built but are unused.

Additionally, our beach erosion projects to critical area. Given the phenomenon of the rising sea level Mr. Chairman, we have recommended that beach erosion control projects be targeted to a few types of land and facilities where a case can be made that stabilization is in the national interest.

Very densely populated areas, industrial sites that are actively in use, military reservations, and the like. Most of the beach erosion control projects contained in this bill would not qualify under that kind of criteria.

Additionally, our Fish and Wildlife mitigation plans propose four projects in the bill. The proposed four projects that warrant construction by contrary standards in the first place. Some of the projects proposed for mitigation in S. 947 are for projects that are already built, others are for projects that are in some early stage of construction.

Now, speaking for the National Wildlife Federation, we are certainly in favor of fish and wildlife mitigation but by way of example, on the west Kentucky tributaries project, the best way to mitigate that project would be to not build in the first place. It is not far along on construction, it is extensive channelization of bottomland areas and it is the kind of project we hope the corps would be moving away from rather than into in this coming decade.

And finally, the projects require and incorporate waivers of standard cost-sharing requirements. I think it a fairly obvious point. The trend and debate is in the other direction and the reports such as the one regarding the Atlantic Intercoastal Waterway bridges, I think would not pass muster in light of new interest in increasing rather than decreasing non-Federal funding participation.

Mr. DYSART. Mr. Chairman, the National Wildlife Federation appreciates the opportunity to present these views to the subcommittee's use and we will be pleased to answer any questions you might have at this time.

Senator ABDNOR. Let me say we appreciate your excellent testimony and we realize you speak with great knowledge and expertise on the subject of water development.

Speaking specifically to projects, you did mention the Big River Reservoir in Rhode Island and the Parker Lake in Oklahoma. We are holding hearings to get specific objections to projects. Do you want to submit some?

Mr. **Osann**. We would like to submit some for the record but I would itemize three or four other projects very briefly that are opposed by state affiliates of the National Wildlife Federation.

The White River navigation project to Batesville is opposed by the Arkansas Wildlife Federation. In their judgment, the project report contains grossly inaccurate data as to the alleged navigation benefits of that project.

The Libby deregulation dam power units opposed by a couple of our affiliates in the Northwest; the Idaho Wildlife and Montana Wildlife Federation. I will point out the report pending before the committee will provide authorization to construct power units in a dam that in itself is not authorized.

Lava flow control project in the State of Hawaii and the Island Hawaii is opposed by our affiliates and Conservation Council for Hawaii, due to serious questions relating to its effectiveness, cost, and impact on native specialized ecosystems.

The Bushley Bayou project in Louisiana is strongly opposed by the Louisiana Wildlife Federation. They are concerned about the failure to provide tangible mitigation for that project and they are concerned about the prospect for pollutants in Cataloha Lake which is a very significant waterfowl area in that part of the State.

Senator **Abdnor**. Thank you, we appreciate that. That is what we are trying to obtain with these hearings and we appreciate the added input you gave us, thank you very much.

Next to testify will be Brent Blackwelder, Director, Water Resources Policy.

STATEMENT OF BRENT BLACKWELDER, DIRECTOR, WATER RESOURCES POLICY PROJECT

Mr. **Blackwelder**. We appreciate again, the opportunity to testify before this committee. I will summarize my statement.

Senator **Abdnor**. The entire statement will be part of the record.

Mr. **Blackwelder**. We want to commend you, Mr. Chairman, for the work you did in the past session of the Congress in trying to maintain the Federal Government's role in water research and to replace an entity for the Water Resources Council. We also want to commend the committee for its action on deauthorization of unneeded projects which occurred in the last Congress.

As you fashion water resources legislation this year, we would hope that you would consider a series of smaller packages rather than one large bill. We would also hope that you would give special attention to another deauthorization bill. We have indicated in our testimony here some projects that we would hope could be included in such a deauthorization bill, such as the Cross-Florida Barge Canal.

Turning to the subject of flood control, in our review of the projects pending before the committee, we were concerned that still there is not enough attention paid to nonstructural measures. If you look at the graph on the next to the last page of my testimony, see that in constant dollars, the annual flood damage experienced by our Nation shows a continuous upward trend. It would seem to me the argument in favor of alternative approaches to flood control will not be so strong if that trendline were downward. That would constitute strong evidence that the existing program was successful. The evidence is to the contrary, that we are not getting on top of flood damages in the United States, that they are getting out of hand. We suggest, therefore, that an alternative approach is needed with greater emphasis on nonstructural flood control measures. Such a recommendation was supported in 1973 by the National Water Commission, it was supported in 1966 by the President's Task Force on Federal Flood Control Policy. Since the budget for water resource development contains less than 1 percent in funding for nonstructural projects, we think that still this is concept that is on the back burner. As you review projects in the bill, for example, Fourche Bayou, note that both EPA and the Fish and Wildlife Service said more attention could be paid for nonstructural measures.

Again and again, as you review the reports on these projects included in S. 947, the same brushoff of nonstructural measures is given.

We would hope the committee could actually include some sort of a policy statement that at least half of the projects being authorized should be predominantly nonstructural in nature.

Turning next to the subject of cost effectiveness and alternative approaches, we are concerned that there are many water resource problems in the Nation and that it is very important to find the most cost effective solutions. There is simply not enough money to go around to meet all of the problems. We commend to the committee's attention an alternative approach to additional stream channelization and straightening, a technique pioneered by George Palmiter in northwest Ohio, a technique for which he has received the Rockefeller Public Service Award, and an award from Outdoor Life magazine.

I am submitting for your records, a story about his method that was carried in the Wall Street Journal last year. Just to describe in brief terms the types of things he does, rather than relying on a lot of expensive actions with heavy equipment, he was able to remove log jams, use selective cutting of timber, placement of trees and bushes so as to deflect current away from eroding banks. He lets the stream do its own cleaning, all of this in a manner which is not involving any objections from fish and wildlife agencies.

Senator **Abdnor**. That is in your packet?

Mr. **Blackwelder**. I will submit this for your records.

Senator **Abdnor**. It will be made a part of the record.

Mr. **Blackwelder**. I believe that as you review a number of your flood control projects, you will see that those contain channelizations of short stretches, flood walls, levies, and the like. It is possible that a more adequate examination of these projects will reveal that the Palmiter technique will be applicable and will save communities millions of dollars.

Next, I want to turn to the question of water supply and contrast that with the improvements in efficiency in the use of water. We have just completed a survey of the water conservation program in the 50 States and have found these produce many advances, both for the consumer and for the community itself from the standpoint of the individual homeowner, a savings of $100, $200 or more a year can result from simple placement of efficient plumbing devices in the home. Communities benefit from water conservation measures because they do not have to enlarge their water treatment facilities, they save on the amount of chemicals that they need to treat their water, they do not have to expand their water or sewage treatment, in some cases they have reduced operations cost, they can extend the life of their sewer systems. There are numerous benefits from becoming efficient in the use of water. If you contrast the cost of becoming efficient with the cost of building new supplies, in the cases that we have looked at, the cost of becoming more efficient are just a fraction, say one-tenth of the cost of development of new supplies.

I cite one project just to illustrate that, which is in your bill, the Parker Lake project, in Oklahoma. There is no discussion in the corps' submission about attempts in the area to become more efficient in their use of water. The question we raise is funding a project like this in the absence of efforts on the part of those communities to become efficient in their use of their water simply to reward them for wasting water. Many parts of the Nation are taking strong steps to become efficient. Why should these communities be penalized and asked to pay for projects if other areas are not becoming efficient, if they are not correcting their wastage?

We would recommend that a good way of dealing with this problem would be to condition your authorizations for water supply development upon communities taking certain steps at self-help first. These are not harsh or austere measures, rather they are measures that actually produce immediate satisfaction both to the individual and to the community.

The committee has an opportunity, in viewing this problem not simply to focus on deterioration of systems in the Northeast, for example, but to focus at cities in the Rocky Mountain States. We often think of leakage problems to beset in Boston or Philadelphia, but the report from Dr. Jerry Meral, deputy director of the California Department of Water Resources, indicated that 32 cities in the Rocky Mountain States were leaking over 40 percent of their water. The State of California is doing much better with a rate of less than 10 percent, about 9½, but nowhere near the level of efficiency achieved in German cities like Berlin where you have leakage rates of only 3 to 7 percent in the system.

So there is a lot more that we can do in this country to become efficient and we would support full-scale efforts that this committee will make either in water resource authorizations or in the so-called infrastructure bills that might provide money and incentives for this particular action.

Another opportunity that you have in authorizing projects is to put specific requirements in along with each authorization. If you review these projects you see, for example, there will be a discussion that flood plain zoning could reduce some of the flood damages. If you condition such authorizations upon such zoning or flood plain management program being in effect prior to construction, you can take an important action in insuring that flood damages in the country actually go down. Similarly there will be a mention of a particular concern and that some measure will be taken to safeguard that. You can condition your authorization upon the safeguarding steps being taken prior to commencement of construction.

This is particularly true with the fish and wildlife mitigation measures. We would urge incorporation of language in each authorization where mitigation is being provided to specify that that mitigation must occur before or concurrently with implementation of the project. One of our concerns is that many major water resource projects in the country have not to this date been mitigated. The Tennessee-Tombigbee Waterway has been under construction for a decade and yet we do not have the mitigation plan before the Congress, there is not mitigation for that project to this date and we think that situation is not acceptable because severe losses of fish and wildlife habitat have already occurred.

The question of efficiency also arises in connection with your projects for inland waterways and for harbors. Often, in the language used in these reports there is congestion or crowding but there is little discussion of whether measures have been taken to improve the efficiency with which a harbor is run. Is that crowding due to poor onshore facilities which cannot load and unload effectively and quickly? We cite the case of coal ports at Norfolk with the delays. Norfolk itself then undertook extensive onshore improvements to speed loading of coal. This question of efficient use of facilities occurred in the last decade, as you will recall with the controversy over lock and dam 26. It was suggested that delays could be significantly reduced through the use of switch boats, schedulings of lockages, and other techniques. Subsequently such measures were implemented. The question we raised on each of these is how often are those measures actually explored, how thoroughly are they explored before seeking a particular construction remedy.

Mr. Chairman, we supported your efforts to achieve port-specific user fees in the last Congress and we would urge passage of waterway user fee legislation this year. We think that passage of such legislation is essential prior to or concurrent with authorization of new projects.

If new channel or harbor projects are authorized in the absence of this user fee, it seems to us that the chances of such legislation moving are greatly reduced.

Finally, I would like to say that we would desire to submit much more detailed comments on individual projects. I think that we have a number of objections to specific projects in this bill.

Senator ABDNOR. You will submit that later?

Mr. BLACKWELDER. Yes, I can enumerate several of them. The west Kentucky tributary has already been mentioned. Bushley Bayou in Louisiana. And in connection with that project, there is one concern that we have about a lot of the drainage and clearing projects along the Mississippi River. The rendering of a certain portion of land as flood-free inevitably means that water is shoved off on some other area. If you look at Bushley Bayou, you will see that is a significant concern with that project: the aggravation of flooding elsewhere as a result of rendering this particular area less flood prone.

So, I think rather than go into more detail on any specific projects, I will be happy to answer any questions that you have.

Senator **Abdnor**. Thank you Dr. Blackwelder. We appreciate your thoughts and some new approaches that should be added and taken prior to project authorization and construction.

This hearing is principally on specific projects. We are interested in receiving your objections to the various projects in this bill as we deal with them. Again, we appreciate your comments and views.

Mr. **Blackwelder**. I hope I have made it clear; for example, on the harbor and navigation projects we cannot support a single one of those in the absence of user fee legislation.

Rather than submit detailed comments on each of those which we can do, we have a much more pressing matter, the question of the cost-sharing on those and that in and of itself may actually render—what it will do is to show which of those are really, truly economically efficient.

Senator **Abdnor**. Thank you, that is going to be a big issue as we consider projects.

I thank you, Dr. Blackwelder.

We have one other witness and we appreciate that he has been willing to wait. Jeffrey Stant of the National Taxpayers Union.

STATEMENT OF JEFFREY STANT, LEGISLATIVE REPRESENTATIVE, NATIONAL TAXPAYERS UNION

Senator **Abdnor**. Mr. Stant, we appreciate your patience and we appreciate having your testimony. We would ask you to summarize your statement. The entire statement will be made a part of the record and you can proceed.

Mr. **Stant**. I am Jeffrey Stant, legislative representative of the National Taxpayers Union, the largest nonprofit, nonpartisan organization representing 120,000 taxpayers, working to reduce taxes and curb wasteful Government spending. Thank you Mr. Chairman, and members of the committee for giving us this opportunity to present our views in regards to Federal funding of the new water projects proposed in S. 947, the Water Resources Development Act of 1983.

I should start by stating that a primary goal of the National Taxpayers Union is to secure ratification of the balanced budget-tax limitation amendment. This amendment is designed to force the Government to live within its means, set its priorities, and keep an honest accounting of its financing. In our view, the now unprecedented Federal budget deficit must be curtailed if America is to realize a sustained economic recovery out of the deep present recession.

The financing of expensive water projects by the Federal Government without reimbursement is a major concern to our organization. The Federal Government, that is, the American taxpayer should not have to pay for nonreimbursable projects which do not provide concrete national benefits. We are committed to the concept of user fees and the eradication of unwarranted taxpayer subsidies to any special interest segment of our society.

In particular, all costs for Government sponsored water projects must be attributed to that segment where they rightly belong, the beneficiaries of the provided surface. If realistic benefit-cost analysis unequivacably shows greater produced benefit by building a project, then it is totally reasonable to expect beneficiaries to repay the full costs, with interest, over a realistic time period.

There are a variety of different mechanisms available to project beneficiaries and State and local governments for financing the costs. The GAO has listed several possible alternatives in its May 1981 funding report focusing on the Tennessee-Tombigbee Waterway. We would support States borrowing Federal funds or issuing long-term bonds with repayment through user charges, or States financing the portions of projects through referendum-established State taxes. Greater effort should be geared toward obtaining direct contributions or increased user charges. Possible user charges include license fees, waterway fuel taxes, local property or business taxes, harbor and channel user fees, distance and weight tolls, public entrance fees, and various charges. While we advocate full reimbursement of costs, we view any partial funding leading to greater cost recovery from beneficiaries as a positive first step toward that goal.

Seventy-eight of the one hundred and one new projects proposed in S. 947 are categorized under a primary benefit of deep-draft navigation, inland and shallow-draft navigation or flood control for which current policy does not mandate reimbursement from project beneficiaries. Thus, of the projected total cost of $6 billion for construction of these projects, approximately $4.8 billion will be largely nonreimbursable paid for by the Federal taxpayer or absorbed by the Federal budget deficit.

This figure does not include the additional substantial costs for operation and maintenance of the 32 navigation projects proposed in S. 947, costs which are also primarily nonreimbursable. The taxpayers deserve to know beforehand what their total investment will be, including O&M costs. For example, the 1981 Office of Technology Assessment technical memorandum entitled "Coal Exports and Port Development" revealed substantial nonreimbursable annual costs required for port maintenance including an average of $200 million per year for current dredging operations at seaports. The annual O&M cost for the coal port in New Orleans was then cited at $19.5 million but projected to rise an additional $75 million from a proposed channel deepening project. The OTA analysis did indicate that a general concensus was reached between the public and private sector supporting the need for a cost-sharing policy for port users. We support the Reagan administration's proposals advocating full or greater cost recovery for inland waterway, deep-draft port dredging projects, and related maintenance.

Without a reimbursement policy that will eventually recoup the bulk of costs inherent and proposed in S. 947, we strongly urge the committee not to move forward with the bill at this time. To proceed forward would be putting the cart before the horse.

We are not necessarily opposed to those seven hydropower development projects in S. 947 for which 100 percent cost reimbursement is mandated by present law. But in general, we question the wisdom of moving forward with additional water projects at a time when the Federal budget crunch persists, and the General Accounting Office has just stated that a $23 billion backlog exists in active projects funded for construction in fiscal year 1982. A January 26, 1983, GAO report indicated the backlog may never be eliminated if inflation picks up, additional revenues are not produced, or some projects not abandoned. It will certainly be increased if substantial Federal expenditures from limited appropriations must be diverted to finance a large number of new projects.

On another facet of project cost, we agree with the theme of the GAO's December 6, 1982, report regarding cost sharing of feasibility studies with non-Federal sponsors. If the costs for feasibility studies are shared with non-Federal interests, studies with strong local support would most likely be completed, with State assistance if necessary, while those studies of marginal value would either be promptly terminated or never initiated in the first place.

We believe that the cost-sharing proposed in S. 1031 is a positive step toward providing greater non-Federal involvement in project construction. However, taxpayers are still saddled with 65 percent of the cost for flood control and agricultural benefits, 50 percent of the cost of recreation and beach erosion control benefits, and 100 percent of navigation benefits under the terms of this bill, making it a far less than adequate final solution to the cost allocation issue in our opinion.

We commend the U.S. Corps of Engineers in its recent efforts to secure greater cost sharing with "innovative financing" proposals for 14 new project starts. As with feasibility studies, the upfront financial commitment of non-federal sponsors should be a prime indicator of the economic viability of these new projects. We feel it is unfair to the taxpayer to proceed forward with any new water projects before resolving this important issue. Nonetheless, the negative response of the House Appropriations Committee to these corps initiatives unfortunately places in doubt the political viability of significant cost-sharing proposals in Congress at the present time.

With over 50,000 dams, 25,000 miles of navigable waterways, 540,000 bridges, and many millions of miles of roads and railroads in the national transportation network, there is no question that America has a gigantic infrastructure that requires enormous sums of capital to operate, maintain, and rebuild. Perhaps this task would not be so overwhelming to the limited financial resources of society if the Federal Government had not long ago embarked upon the precedent of subsidizing these items without eventual reimbursement. To ask the American taxpayer to subsidize 101 more water projects in the face of enormous pressure to reduce Government spending is highly inconsistent and will only exacerbate the problem by increasing the quantity of infrastructure to rebuild instead of rebuilding what we already have. Initiating greater cost sharing via user fees to all project beneficiaries with the aim toward an eventual full reimbursement policy, will rebuild our Nation's infrastructure in the most equitable and efficient fashion while preserving the spirit of our free enterprise system.

Thank you very much.

Senator ABDNOR. Thank you Mr. Stant, for your testimony. Would you apply your views to every water project we build?

Mr. Stant. Are you asking if we would support the rebuilding——

Senator Abdnor. Any new projects you feel that should be 100 percent payback on the project. I know that 46 of the 101 projects are flood control, do you give any greater consideration to that or make that an exception to your general philosophy here? We have seen what has happened in past years and what happens today over some projects that have been very beneficial. I was wondering how you would handle that?

Mr. Stant. We think that in general, there has to be greater cost recovery for flood control projects. If the corps benefit-cost analysis is based on benefits that will be accrued from flood controls, then there has to be some quantifiable way of measuring those benefits. We would support some type of zoning of flood prone areas so that some type of property tax or business sales tax on the local level could be raised to pay for development that takes place in those areas as a result of flood control

Senator Abdnor. Thank you, all of this testimony will be considered, as we discuss the various projects.

We do appreciate your statement and testimony. Thank you very much.

For the record, I am going to include a statement by Senator Baucus, a member of the Subcommittee on Water Resources, who could not be here today.

[Senator Baucus' statement follows:]

STATEMENT OF SENATOR MAX BAUCUS
SUBCOMMITTEE ON WATER RESOURCES
April 22, 1983

Mr. Chairman, I request that you strike project number (5), under section (d) from Title II of the bill. This is the authorization of the Libby Reregulation Dam Power Units on the Kootenai River in Montana.

I am sure the Chairman knows the history of my fight to stop the construction of the Libby Reregulation Dam. The battle is now over as far as I am concerned. Back in 1979, I asked the General Accounting Office (GAO) to recompute the benefit-cost ratio of the Libby Reregulation Dam using more recent economic data than the Army Corps of Engineers was willing to use.

The GAO concluded that the reregulation dam would yield 58 cents in benefits to each $1 expended -- for a benefit-cost ratio of 0.58 to 1.

The "Libby Additional Units and Reregulating Dam" (LAURD) I not a normal water project. It certainly should not be considered as "hydropower development." It is a "peaking power" project only. This distinction is important. The West needs good water projects -- to irrigate farm lands, to stop floods, T provide recreation and to improve shipments on inland waterways. But the LAURD project will not irrigate one acre. It provides N recreation. And, most importantly, LAURD will not provide any

SIGNIFICANT NEW POWER.

UNDER CURRENT BUDGET CONSTRAINTS, THIS PROJECT SHOULD NOT BE AUTHORIZED. THERE ARE MANY PROJECTS CONTAINED IN S. 947 THAT ARE VITAL -- THEY SHOULD BE AUTHORIZED. I FULLY SUPPORT THE AUTHORIZATION FOR THE BONNEVILLE LOCK AND DAM ON THE COLUMBIA/SNAKE RIVER SYSTEM. THIS PROJECT MUST BE COMPLETED TO ELIMINATE THE PRESENT BOTTLENECK OF BARGE TRAFFIC HAULING GRAIN TO WEST COAST PORTS.

MR. CHAIRMAN, I AGAIN ASK THAT THE AUTHORIZATION FOR THE LIBBY REREGULATION DAM BE STRICKEN FROM THE BILL. I CANNOT, AND WILL NOT, SUPPORT THIS LEGISLATION UNLESS THIS SECTION IS DROPPED. I LOOK FORWARD TO WORKING WITH THE CHAIRMAN AND THE COMMITTEE IN CONSIDERING AND PASSING AN OMNIBUS WATER RESOURCES BILL IN THIS CONGRESS.

I ASK THAT THE ADDITIONAL MATERIAL ATTACHED TO MY STATEMENT BE MADE A PART OF THE RECORD.

Senator **Abdnor**. I want to say in closing something about cost sharing and user fees. These are critical water resources issues and they are going to have to be addressed by this subcommittee. The hearings scheduled for the 17th and 18th of May are intended to accomplish that very purpose. I officially believe that if these issues are addressed, head-on as we intend to do, that they can be resolved quickly and water resources development projects, which we feel this Nation needs can move forward. If necessity is the mother of invention, then we have reached the point in water resources development where inventive solutions will be found for these thorny issues.

We must not delude ourselves, we cannot turn to yesteryear with the old business as usual attitude. I think we are all willing to accept that premise now. The realities of the budget require that new cost sharing user fee solutions be found for water resources.

I want to thank all of today's witnesses for appearing before the subcommittee. Your opinion is going to be of great value to the work of the subcommittee in the coming weeks.

We will adjourn the hearing now and reconvene next month when we hope to take up some of these very issues we are talking about.

Thank you all for your attendance.

[Whereupon, at 12 noon, the hearing was adjourned, to reconvene at the call of the chair.]

[Statements submitted for the record and the bill, S. 947 follow:]

STATEMENT BY SENATOR ALAN CRANSTON BEFORE THE SENATE ENVIRONMENT AND PUBLIC WORKS COMMITTEE SUBCOMMITTEE ON WATER RESOURCES REGARDING S. 947 AND THE SANTA ANA RIVER MAINSTEM FLOOD CONTROL PROJECT IN CALIFORNIA

April 22, 1983

Mr. Chairman, I appreciate having the opportunity to present comments to the Senate Environment and Public Works Committee Subcommittee on Water Resources regarding S. 947, a bill to authorize Corps of Engineers construction of new water resource development projects, including eight projects in the State of California -- San Francisco Fisherman's Wharf breakwater, Oakland Outer Harbor, Richmond Harbor, Sacramento River Deep Water Channel, Cache Creek, Redbank and Fancher Creeks, Santa Ana River Mainstem, and fish and wildlife mitigation for the Sacramento River Bank Protection Project. I support authorization of all these California projects, and moreover have sponsored separate legislation, S. 630, authorizing Corps construction of the Redbanks and Fancher Creeks flood control project.

Today I want to focus my remarks on S. 947 on the Santa Ana River Mainstem project. According to the California Water Resources Agency, Orange County below the Prado Dam on the Santa Ana River is the most serious flood threat in the state. Due to appreciation of property values, the potential damage to property in the flood plain is now $9 billion if Prado Dam fails before the Santa Ana flood improvements are constructed.

In January 1982 the Chief of Engineers approved a report proposing a project for the Santa Ana River Mainstem, including enlargement of Prado Dam, improvements along Oak Street Drain, Santiago Creek and the Lower Santa Ana River, and construction of Mentone Dam. There is unanimous local support for the project, except for the Mentone Dam unit about which questions have been raised by special water interests in San

Bernardino County. As a result, the three counties affected by the project -- Orange, Riverside, and San Bernardino have proposed that additional studies be made regarding alternatives to the Mentone unit. But because of the critical need for flood protection along the Santa Ana River, the counties are asking Congress to authorize the other features of the Santa Ana River Mainstem project on which there is agreement. I support their request and am attaching to my statement alternative authorizing language which is endorsed by all three counties. I urge the Senate Environment and Public Works Committee to include the Santa Ana River Mainstem project in any omnibus water project bill approved by the Committee using the alternative authorizing language.

Thank you.

PROPOSED AUTHORIZATION LANGUAGE FOR THE SANTA ANA RIVER PROJECT

RECOMMENDED BY RESOLUTIONS: San Bernardino County (28 March 1983)
: Riverside County (29 March 1980)
: Orange County (29 March 1983)

"The project for flood protection on the Santa Ana River, California, is hereby authorized for construction substantially in accordance with the recommendation of the Chief of Engineers' Report dated 15 January 1982, including reservoir storage in the Upper Santa Ana Basin, except that construction at this time is restricted to the following elements of the project: improvements at Prado Dam which limit the reservoir taking line to no greater than an elevation of 566 feet; Santa Ana River Channel improvements in Orange County; improvements along Santiago Creek; improvements of the Oak Street Drain; and improvement of the Mill Creek levees; features for mitigation of project effects and preservation of endangered species, and recreation features identified in the Chief of Engineers' Report for these project elements. Flood protective measures other than those cited above will be undertaken only after issues relating to reservoir storage in the Upper Santa Ana Basin have been addressed by the Corps of Engineers and agreed to by resolutions of the local sponsoring agencies."

United States Senate
WASHINGTON, D.C. 20510

July 11, 1983

The Honorable James Abdnor
Chairman
Subcommittee on Water Resources
Committee on Environment and Public Works
United States Senate
Washington, D.C. 20510

Dear Mr. Chairman:

I respectfully request that your Subcommittee favorably consider authorization of the Santa Ana River Mainstream Flood Control project in your bill S. 947, the "Water Resources Development Act of 1983."

The Santa Ana River Basin encompasses about 3,000 square miles in parts of San Bernardino, Riverside, and Orange Counties. The U.S. Army Corps of Engineers has recognized this area as one of the greatest flood hazards in the United States and has recommended a comprehensive flood control project which would provide protection against the theoretical "standard project flood."

The General Design Memorandum proposes a three-part construction project: the Santa Ana River Channel, expansion of Prado Dam, and the creation of a Mentone Dam. The Santa Ana River Channel will provide increased protection downstream from Prado Dam. Current channels are inadequate to handle large flows safely, some stretches having only the capability of handling an eight-year flood.

The existing Prado Dam, constructed in 1941, was based on future development estimates from the 1930's. The downstream growth has exceeded expectations and, as such, the existing dam makes the densely populated Orange County area highly vulnerable to catastrophic flooding. In order to deal with this, the dam will be expanded to prevent it from reaching its capacity and overspilling downstream.

The Mentone Dam will increase flood control in the Upper Basin. While control of the Upper Basin is deemed necessary, additional studies are currently being conducted to determine the most efficient and cost-effective alternative.

The Santa Ana All River Plan is needed to eliminate the existing hazard and provide standard project flood level protection in the Santa Ana River Basin. While I support the comprehensive River Plan, at this time, I am requesting authorization for the project exclusive of the Mentone Dam. I believe that the Upper Basin feature is important to the overall plan; however, additional flood protective measures should be undertaken only after the issues relating to reservoir storage in the Upper Santa Ana Basin have been addressed by the Corps of Engineers and agreed to by resolutions of the local sponsoring agencies. Upon conclusion of those studies, an authorization for construction is anticipated that will increase the level of protection from an intermediate regional flood to a standard level flood.

The total cost of the All River Plan is high, but with a potential project design flood damage of $9 billion directly affecting over a half million structures and threatening the lives of nearly 2 million people, there seems to be little alternative.

I urge your support for the Santa Ana River Mainstream Project and thank you for your consideration.

Sincerely,

Pete Wilson

PETE WILSON

JERRY LEWIS
35TH DISTRICT, CALIFORNIA

COMMITTEES:
APPROPRIATIONS
SUBCOMMITTEES:
HUD-INDEPENDENT AGENCIES
FOREIGN OPERATIONS
LEGISLATIVE BRANCH
(RANKING MINORITY MEMBER)

Congress of the United States
House of Representatives
Washington, D.C. 20515

WASHINGTON OFFICE
ROOM [illegible]
CANNON HOUSE OFFICE BUILDING
202-225-[illegible]

DISTRICT OFFICES
101 SOUTH SIXTH STREET
REDLANDS, CALIFORNIA 92373
714-[illegible]
714-[illegible]

BARSTOW, CALIFORNIA 92311
619-256-[illegible]

Testimony for the Subcommittee on Water Resources for the Senate

Mr. Chairman, I appreciate very much the opportunity to share with your Committee my strong feelings regarding the Santa Ana Project which you will be hearing a great deal about. The Santa Ana Project is vital to Southern California and has been a major source of controversy in our region for some time. All three Counties that are directly involved, my own County of San Bernardino, Riverside, and Orange County feel a strong sense of urgency to ensure protection along the Santa Ana River. We particularly want Congress to recognize the urgent need for protection of those thousands of lives and billions of dollars in property that could be lost by major flooding in Orange County.

The major controversy of the All River Plan was a dam proposed at the upper end of this project in my County known as the Mentone Dam. Serious disagreement over this dam could have killed the support necessary for this project to go forward. I am pleased to note that these three Counties have worked intensely together with the Corps of Engineers and are now recommending an alternative to the Mentone Dam which is to be located in the upper reaches of the Santa Ana Canyon. I believe the alternative approach of building the dam out of sight, possibly named the Santa Ana Dam, makes the project viable and allows all three Counties to give their full support.

I would also like to submit a letter addressed to the Chairman of the House Public Works Subcommittee on Water Resources, Congressman Robert A. Roe, which expresses Congressional support for the project and for the research of the alternative dam by Members whose districts are affected.

In closing, let me urge this Committee to recognize the importance of the alternative to the Mentone Dam and to direct the Corps of Engineers to move forward with the planning process.

RON PACKARD
43rd District, California

Committees:
Public Works
and Transportation
Education and Labor

Congress of the United States
House of Representatives
Washington, D.C. 20515

Washington Office:
511 Cannon House Office Bui
Washington, D.C. 20515
(202) 225-3906

District Offices:
2121 Palomar Airport Road
Suite 105
Carlsbad, California 92008
(619) 438-0443
(619) 941-0043

28261 Marguerite Parkway
Suite 160
Mission Viejo, California 92692
(714) 495-1243

April 12, 1983

Honorable Robert A. Roe
Chairman
House Public Works Subcommittee
on Water Resources
Washington, D.C.

Dear Mr. Chairman:

In an effort to assist your consideration of the Santa Ana River flood control (Main Stem) project, we have provided draft language below.

> The project for flood protection on the Santa Ana River, California is hereby authorized for construction substantially in accordance with the recommendation of the Chief of Engineers' Report dated 15 January 1982, including reservoir storage in the Upper Santa Ana Basin, except that construction at this time is restricted to the following elements of the project: improvements at Prado Dam which limit the reservoir taking line to no greater than elevation 566 feet; Santa Ana River channel improvements in Orange County; improvements along Santiago Creek; improvements of the Oak Street Drain; improvement of the Mill Creek levees; features for mitigation of project effects and preservation of endangered species; and recreation features identified in the Chief of Engineers' Report for these project elements. Flood protective measures other than those cited above will be undertaken only after issues relating to reservoir storage in the Upper Santa Ana Basin have been addressed by the Corps of Engineers and agreed to by resolutions of the local sponsoring agencies.

This language was drafted and agreed to by the County Boards of Supervisors in Orange, Riverside, and San Bernardino. With recent flooding in Southern California, we believe that construction authorization as set forth above is all the more imperative. We appreciate your efforts to move this legislation forward.

Sincerely,

Jerry Lewis
Bill Dannemeyer
Jerry M. Patterson

Ron Packard
Al McCandless
Daniel E. Lungren
George E. Brown, Jr.

TESTIMONY

HONORABLE ROBERT O. TOWNSEND
SUPERVISOR SAN BERNARDINO COUNTY

STATEMENT ON

SANTA ANA RIVER MAIN STEM PROJECT

BEFORE

U.S. SENATE COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
SUB-COMMITTEE ON WATER RESOURCES

Board of Supervisors · County of San Bernardino

Robert O. Townsend
SUPERVISOR FOURTH DISTRICT

Martin A. Cervantes
ADMINISTRATIVE ASSISTANT

April 22, 1983

The Honorable James Abdnor
4327 Dirksen Office Building
United States Senate
Washington, D.C. 20510

Dear Senator Abdnor:

I will keep my testimony very brief since San Bernardino does support the Santa Ana Main Stem Project and recognizes the need for your committee to hear from opponents of the project. It is important, however, for you to understand the basis of our support so that authorization can proceed in an acceptable manner.

The flood problem has been characterized as the worst in the nation, with a project design flood damage of 9 billion dollars directly affecting over a half million structures and threatening the lives of 1,800,000 people.

Ninety-seven percent of the benefits of this project will accrue to Orange County. On the other hand, over half of the construction efforts necessarily occur in San Bernardino County. It is not, however, fiscally or practically feasible to confine flood protection measures to Orange County.

The flood control measures recommended have been arrived at over the past 18 years since formal inception of the project. The Chief of Engineers' report recommending the "All River Plan" was submitted to the Secretary of the Army on January 15, 1982. Refinements in the last year have centered around addressing concerns related to the Mentone Dam element which is in the upper basin area of our County.

It is important for the total project to be authorized and constructed in an acceptable manner which will provide the needed protection in our County and which will offset the adverse impacts of reservoir storage in our County.

The Counties of San Bernardino, Orange and Riverside; the Corps of Engineers; and other local interests in our County strongly support the authorization language adopted by our respective Boards of Supervisors and further amplified by the Corps of Engineers' letter to our Chairman dated March 23, 1983.

It is our request that the intent of the recommended authorization language be incorporated in the authorizing bill. Additional information which will provide greater insight is included in the remainder of this testimony.

Respectfully yours,
Robert O. Townsend
ROBERT O. TOWNSEND
Supervisor

County Civic Building, 175 West 5th Street, San Bernardino, CA 92415 · (714) 383-2713

CONTINUED

STATEMENT OF ROBERT O. TOWNSEND

SAN BERNARDINO COUNTY

BEFORE THE SENATE SUBCOMMITTEE ON WATER RESOURCES

SANTA ANA MAIN STEM FLOOD CONTROL PROJECT

As mentioned earlier, our County is a strong supporter of the project, however, it is very important that we proceed with the authorization language and construction in a manner which is consistent with the intent of the agreements reached by the three affected Counties of San Bernardino, Orange and Riverside.

A brief review of the background will give a better prospective of the considerations, concerns and constraints which affect the project.

The 75 mile length of the Santa Ana River from the San Bernardino Mountains to the Ocean and traversing three Counties is shown on the cover of this report. The Standard Project Flood (SPF) overflow area is shown in dark blue and poses the greatest flood problem in the United States.

Large floods in the Santa Ana River Basin occur in magnitude incomprehensive to those who have not witnessed their destruction. Recorded data indicate that 15 medium to large winter floods have occurred since 1900. Available information indicates a flood in 1862, after 15 days of continuous rain, water broke out of Santa Ana River and brought destruction and desolation to everything in its path. The flood's peak discharge is estimated at 327,000 cubic feet per second. The largest recorded flood in this century occurred in 1938 when peak flows reached 100,000 cubic feet per second.

A SPF would inundate over 110,000 acres and directly involve some 500,000 homes and 1,800,000 people who now live within the SPF plain. The areas inundated would include hundreds of thousands of homes, thousands of businesses and factories and hundreds of schools. With only about eight hours warning time, complete evacuation before the peak flood would be impossible. People would be unaware of how to escape. With several hundred thousand potentially affected homeowners, the demands on assistance would be staggering.

Portions of 18 cities lie within the basins' overflow area. The average depth of flood waters will be three feet for a SPF. Huntington Beach low areas will have an average depth of six feet.

Without further flood control along the Santa Ana River, future floods could cause an estimated $9 billion in damages and would jeopardize the lives of nearly 2 million people who live or work in the flood plain, primarily in Orange County. The magnitude of this hazard increases with each passing day.

The lower basin is currently providing limited protection by Prado Dam and Reservoir which was completed in 1941. At the time, it was thought that the dam and reservoir could be capable of controlling a 200-year flood. It is now recognized that Prado Dam presently offers only 70-year protection. A large flood could fill the reservoir and flood uncontrolled over the spillway, threatening these two million people. Another serious concern is that the existing Prado Dam and spillway could not accommodate a probable maximum flooding resulting in overtopping of the dam.

Under the Dam Safety Assurance Program, a study is being conducted to modify Prado Dam so that it can safely pass a maximum probable flood without overtopping the dam. This modification will not provide any additional flood protection. Downstream of Prado, channels are inadequate to handle large flows safely, some stretches only having the capability of handling an eight year flood.

In my County, the Santa Ana River poses a major flood problem from the canyon mouth east of San Bernardino and Redlands (See figure 2). Without improvements, flooding will damage Norton Air Force Base and the southern part of San Bernardino, including much of the Inland Shopping Center. There are also portions of Loma Linda, Colton and Grand Terrace which would be flooded.

A major flood would result in many adverse socioeconomic impacts cutting off transportation arterials, including interstate freeways and inter-continental railroads, washing out sewer treatment plants and severing major industrial pipelines.

Under the existing conditions of development and current price levels, damage in San Bernardino County (See figure 1 and 2) would amount to $430 million for a SPF and would be $200 million from a 100-year flood.

A 40-year frequency flood in 1969, which flows reached 36,000 cubic feet per second, caused $43 million damages in San Bernardino County alone.

An initial study of a plan which confined construction to Orange County, the main problem area, revealed that such a plan would require the relocation of about 4,000 homes and businesses and significant channel expansion.

The report also found channel expansion beyond the existing rights-of-way in Orange County is far more expensive than additional upstream storage.

One obvious solution would be to increase the height of Prado Dam to provide the needed storage. Taking additional land at Prado for flood storage to protect lands in Orange County is clearly the issue which became the paramount concern of the Santa Ana River Study.

The residents around Prado Reservoir are particularly concerned that the area remaining is one of the few open agricultural areas in close proximity to the greater Los Angeles area. Maintaining the rural atmosphere of the Prado area has high priority for these residents.

Without supplemental upstream storage, the land acquisition line at Prado would need to be raised to elevation of 580 to control SPF. The current acquisition line is at elevation 556. Seven hundred and twenty-four homes and businesses would be impacted by raising the land acquisition line from elevation 566 to 580.

The enlargement of Prado Reservoir was therefore limited for severe socioeconomic impacts around the reservoir fringe. An upstream flood storage component on the main stem of the Santa Ana River was determined to be the most cost efficient location to provide maximum flood control benefits while minimizing socio-economic impacts in the three Counties.

The Corps of Engineers completed the General Design Memorandum by the recommended "All River Plan" project in September 1980, and was thereafter submitted to the Secretary of the Army.

In mid 1981, local water agencies, private citizens and other groups in San Bernardino County expressed concern about the Mentone Dam element which provides storage in the upper basin (See figure 2). This concern centered around authentic incompatability with the surrounding area, possible adverse impacts on ground water recharge and seismic concerns.

As a result of continuous meetings with interested groups and with information from additional reports, there evolved a coalition of strong, unified support for authorization of the recommended "All River Plan" subject to refinement of the reservoir storage element in the upper basin and approval by the sponsoring agencies. San Bernardino County Board of Supervisors Resolution No. 83-109 supporting authorization is attached and is a part of this testimony.

By letter of March 23, 1983 (attachment 2) the Corps of Engineers have indicated their concurrence and intent to review and evaluate refinements for storage in the Upper Santa Ana Basin. It appears a storage reservoir above the Mentone site may provide acceptable protection at a lower cost and with good public acceptance.

The "All River Plan" which is recommended calls for construction of Mentone Dam (see figure 1 and 2) on the upper Santa Ana River, raising Prado Dam 30' and the acquisition line 10 feet to elevation 566; construction of Oak Street Drain; acquisition of flood plain lands in Santa Ana River; construction of Santiago Creek improvements; and acquisition of eight acres of marsh lands for mitigation and 84 acres of marsh lands for preservation. Raising the acquisition line from the current 556 to 566 would require 1,461 acres of additional land and would affect 121 homes, two ranches, 27 dairies, and eight businesses.

The "All River Plan" would have a number of significant beneficial effects for the residents of Orange County, while there would be adverse impacts, mainly associated with the relocation of homes and businesses and the residents and loss of prime agricultural land in the upper river area.

The "All River Plan" would reduce the flood damage potential from the Santa Ana River by 72% in the upper basin and by 86% in the lower basin.

The project cost of $1.2 billion is justified by the protection afforded to prevent a potential $9 billion property damage and the disruption of the lives and homes of 1,800,000 people.

We recognize the critical need for flood protection and significant benefits provided to Orange County by the construction in our County. We also recognize the significant adverse effects in our County which can only be offset locally by completion of facilities and storage in the upper basin which will provide flood protection in our County between the San Bernardino Mountains and Prado Dam.

It is the intent of our resolution supplemented by the Corps of Engineers letter of March 23, 1983 that all elements of the project be authorized for construction and funds appropriated for construction. Continued planning and Engineering to resolve and refine features in the upper basin would be diligently pursued by the Corps of Engineers, as outlined in their letter. Construction of features in the upper basin, other than the Mill Creek levees, would be undertaken when the refinements are approved by the sponsoring agencies.

Thank you for the opportunity to testify before your committee.

ATTACHMENTS March 28, 1983

MINUTES OF THE BOARD OF SUPERVISORS

COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA

On motion by Supervisor McKenna, duly seconded by Supervisor Hammock, and carried, the following resolution is adopted by the Board of Supervisors of the County of San Bernardino, State of California:

RESOLUTION NO. 83- 108

WHEREAS, the Board of Supervisors of Orange, Riverside and San Bernardino Counties endorse the All River Plan concept for the Santa Ana River Main Stem project substantially in accordance with recommendations of the Chief of Engineers of the U. S. Army Corps of Engineers' report dated 15 January 1982; and

WHEREAS, concern has been expressed by local citizens as well as elected and appointed officials in incorporated and unincorporated jurisdictions relating to certain elements of the plan; and

WHEREAS, periodic meetings between Orange, Riverside, San Bernardino Counties and the Los Angeles District Corps of the Engineers representatives for the purpose of inter-agency coordination have resulted in a supportive coalition of sponsoring agencies;

NOW, THEREFORE, BE IT RESOLVED that the Board of Supervisors of the County of San Bernardino adopt the following authorization language for the Santa Ana River Project:

"The project for flood protection on the Santa Ana River, California, is hereby authorized for construction substantially in accordance with the recommendation of the Chief of Engineers' Report dated 15 January 1982, including reservoir storage in the Upper Santa Ana Basin, except that construction at this time is restricted to the following elements of the project: Improvements at Prado Dam which limit the reservoir taking line to no greater than an elevation of 566 feet; Santa Ana River channel improvements in Orange County; improvements along Santiago Creek; improvements of the Oak Street Drain; improvement of the Mill Creek levees; features for mitigation of project effects and preservation of endangered species, and recreation features identified in the Chief of Engineers' Report for these project elements. Flood protective measures other than those citied above will be undertaken only after issues relating to the Reservoir storage in the Upper Santa Ana Basin have been addressed by the Corps of Engineers and agreed to by resolutions of the local sponsoring agencies."

PASSED AND ADOPTED by the Board of Supervisors of the County of San Bernardino, State of California, by the following vote:

AYES: SUPERVISORS: Joyner, McKenna, Hammock, McElwain
NOES: SUPERVISORS: None
ABSENT: SUPERVISORS: Townsend

ATTACHMENT 1

3/28/83 #55

DEPARTMENT OF THE ARMY
LOS ANGELES DISTRICT, CORPS OF ENGINEERS
P. O. BOX 2711
LOS ANGELES, CALIFORNIA 90053

March 23, 1983

REPLY TO
ATTENTION OF
SPLDE

Honorable Cal McElwain
Chairman
Board of Supervisors
San Bernardino County
175 West Fifth Street
San Bernardino, California 92415

Dear Mr. Chairman:

As you know, the Corps of Engineers is currently in the Continued Planning and Engineering Phase of the Santa Ana River Project known as the All River Plan, and is looking forward to receiving authorization soon. This letter outlines the Corps' plan of action for review and refinement of the All River Plan in response to interest expressed by your County. The Corps of Engineers understands that Mentone Dam has been a point of concern with local water districts, citizens, and the city of Redlands, and that their support at this time is contingent upon a thorough and complete evaluation of alternative flood protection measures in lieu of Mentone Dam. The Corps further understands that San Bernardino County is willing to consider less than Standard Project Flood protection if not economically justified or affordable. Therefore, I would like to inform you that the Corps of Engineers will:

a. Evaluate construction of the Upper Mentone Dam. The review will include sizing to control the Standard Project Flood at the location of the dam site, and impact on land use.

b. Review viability for additional storage, levee protection, and other measures to provide Standard Project Flood protection if feasible, or if not, lesser levels of protection on the Upper Santa Ana River.

c. Conduct task force meetings in San Bernardino County to disseminate progress reports, review study results, and gather comments from interested groups and agencies.

d. Review feasibility of a gated spillway at Prado Dam.

e. Evaluate impacts of final recommended plan on land uses, existing water distribution systems, and historic water uses.

f. Review any proposed flood control storage upstream of Prado Reservoir for opportunities to store water at times other than flood season.

The above represents my understanding of your County's concerns and identifies the course of action that the Corps of Engineers will pursue in its Post-Authorization Study of the Project. If I can offer further assistance, or if there is additional information that you desire, please let me know. We look forward to working closely with you in the further development of this important project.

Sincerely,

Paul W. Taylor

Paul W. Taylor
Colonel, Corps of Engineers
District Engineer

ATTACHMENT 2

RESOLUTION OF THE BOARD OF SUPERVISORS OF THE ORANGE COUNTY FLOOD CONTROL DISTRICT OF ORANGE COUNTY, CALIFORNIA

May 17, 1983

On motion of Supervisor Stanton, duly seconded and carried, the following Resolution was adopted:

WHEREAS, the U.S. Army Corps of Engineers has described the Santa Ana River as the greatest unresolved flood hazard in the Western United States, and has prepared a General Design Memorandum recommending a comprehensive project, which upon completion of construction, would provide protection against the theoretical "Standard Project Flood"; and

WHEREAS, the 1983 costs for the Santa Ana River Main Stem Project construction are estimated at approximately $1.2 billion dollars for project completion; and

WHEREAS, the Boards of Supervisors of Orange, Riverside and San Bernardino Counties, by concurrent resolutions dated March 29, 1983 have requested the Congress to authorize project construction of project features having a cost on the order of $800 million while deferring the Mentone Dam feature until consideration of other alternatives meeting the approval of the San Bernardino County Board of Supervisors; and

WHEREAS, the primary deficiency in the existing level of flood protection is in the lack of capacity in Prado Dam and Reservoir, constructed, owned and operated by the U.S. Army Corps of Engineers, which in 1970 revealed publicly the Prado deficiencies; and

WHEREAS, the U.S. Senate Committee on Environment and Public Works is now conducting hearings regarding S.1031, a Bill which would change existing law regarding local cost sharing in federal projects so as to require local participation in the following percentages of project costs:

//

Resolution No. F83-13
Santa Ana River Flood
Control Costs
CBS:dab

(a) Flood control - 35%

(b) Beach erosion and periodic nourishment - 50%; and

WHEREAS, the Board of Supervisors of Orange County, California agrees that local agencies should assume an increased level of cost sharing for the Santa Ana River Project provided the Congress recognizes the improvement of the federal project at Prado Dam as a unique situation with cost sharing the same as required in the original construction of the project;

NOW, THEREFORE, BE IT RESOLVED as follows:

1. The Orange County Board of Supervisors supports the concept of a fair share, not to exceed 35%, for flood control costs in the improvement of the Santa Ana River downstream from Prado Dam.

2. Provision should be made for yearly payments for the local share at a rate commensurate with the yearly installation of the project improvements. Such payments would include cash, and/or in lieu of cash, construction work such as major bridge improvements necessary to accommodate channel improvements, and r/w acquisition and utility relocation as approximate.

3. The County of Orange should bear no part of the cost of the work required to upgrade Prado Dam and Reservoir.

4. It is acknowledged that prior to completion of Mentone Dam, or its equivalent alternatives, the Orange County area below Prado Dam will be afforded a level of flood protection somewhat less than the Standard Project Flood level, but better than the intermediate regional flood (100-year) established as the national standard for flood protection under the Federal Flood Insurance Administration.

5. The Clerk is directed to forward a copy of this resolution to Senator Robert Stafford, Chairman of the Senate Committee on Environment and Public Works and to each member of the Orange County Congressional Delegation.

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AYES: SUPERVISORS ROGER R. STANTON, BRUCE NESTANDE, RALPH B. CLARK, and THOMAS F. RILEY

NOES: SUPERVISORS NONE

ABSENT: SUPERVISORS HARRIETT M. WIEDER

STATE OF CALIFORNIA)
) ss.
COUNTY OF ORANGE)

I, JUNE ALEXANDER, Clerk of the Board of Supervisors of the Orange County Flood Control District of Orange County, California hereby certify that the above and foregoing Resolution was duly and regularly adopted by the said Board at a regular meeting thereof held on the 17th day of May, 1983, and passed by a unanimous vote of said Board members present.

IN WITNESS WHEREOF, I have hereunto set my hand and seal this 17th day of May, 1983.

June Alexander
JUNE ALEXANDER
Clerk of the Board of Supervisors
of the Orange County Flood Control
District of Orange County,
California

STATEMENT OF RIVERSIDE COUNTY AND THE RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT REGARDING

SANTA ANA RIVER MAIN STEM, INCLUDING SANTIAGO CREEK

To: U.S. Senate
Committee on Environment
and Public Works
Subcommittee on Water Resources

Honorable James Abdnor
Chairman

The Santa Ana River, Main Stem Survey Report, was completed in 1975. The Survey Report was submitted by the District Engineer of the Los Angeles District after nine years of exhaustive study, meetings and hearings. The Survey Report recommended construction of the "All River Plan" which involved improvement of the Santa Ana River channel through Orange County; enlargement of the existing Prado Dam near Corona, California; construction of a dam across the river near Mentone, California, in San Bernardino County; improvements along Santiago Creek, a tributary stream in Orange County; and improvements along Oak Street Drain, a tributary in the city of Corona, Riverside County; plus other miscellaneous environmental and recreational features. The "All River Plan" was the only plan providing standard project flood protection along the main stem of the river that was acceptable to all interests. Other alternatives considered that had comparable economic justification adversely affected different jurisdictions in an unacceptable manner. The most notable alternative was the plan to raise Prado Dam some 45 feet. This alternative plan, while providing maximum benefits for the least cost, would require taking 718 homes, 82 dairies, 6 ranches and 25 businesses at Prado reservoir, remove 5,545 acres of land from the local tax base and productivity, cost 651 jobs just from the relocation of present facilities and require the relocation of a State Prison. This plan impacted both Riverside County, San Bernardino County and the City of Corona in Riverside County.

Phase I advanced engineering and design for the Santa Ana River, Main Stem, was authorized by Section 109 of the Water

Resources Development Act of 1976 (PL 94-587). The Phase I report of the Santa Ana River, Main Stem, including Santiago Creek, has reaffirmed, with some minor changes, the findings of the Survey Report recommending the "All River Plan." The Chief of Engineers submitted the Phase I report to the Secretary of Army on January 15, 1982.

Since completion of the Phase I report some local water agencies and property development interests in San Bernardino County around and within the proposed Mentone Dam reservoir have expressed concern over some specific issues about the dam and its impact on the surrounding area and ground water supplies. The Administration has expressed serious concern over the total cost of the project (1.16 billion dollars) and has been discussing scaling the project down in size and scope. In view of these mentioned concerns, there have been suggestions that the project plan be implemented without the Mentone Dam or that the lower two-thirds of the plan be authorized for construction while alternatives to the Mentone Dam be studied. Such alternatives might consist of one or more dams further upstream in the mountain canyons.

The "All River Plan" was developed as a balanced plan to solve flooding problems along the main stem of the Santa Ana River with a minimum of adverse impacts. Changing that plan, such as deleting or significantly modifying any element of the plan, would change the sensitive balance that was achieved with the plan. Eliminating Mentone Dam, for example, would change the design hydrology and hydraulics at Prado Dam, causing inundation of properties around the reservior above the proposed reservoir take line in the event of a Standard Project Flood. Who would be responsible and liable for the resulting damage to those properties? Such a condition would be unacceptable to Riverside County and the City of Corona. We would oppose any design change that would require a reservoir acquisition above elevation 566 (mean sea level).

We in Riverside County recognize the need for this project and desire to cooperate in its development and implementation even though our County receives minimal benefits while receiving significant adverse impacts. We also recognize that because of the size and cost of the project, construction will have to proceed in stages. While work proceeds on the downstream elements of the plan, the issues at Mentone Dam can be further addressed and, hopefully, resolved. In the event those issues cannot be resolved or acceptable upstream storage found, then design changes at Prado Dam and the channel through Orange County must be made.

The Oak Street Drain is a vital part of the "All River Plan" in that this channel improvement will eliminate a major flooding problem in the city of Corona and will mitigate the adverse impacts of increasing the Prado Reservoir to elevation 566. The enlarged Prado Reservoir required for the "All River Plan" requires acquiring 121 homes, 2 ranches, 27 dairies, 8 businesses and 1461 acres of additional land. Some of the land to be taken within the boundary of the city of Corona is prime residential and industrial property. It is estimated that an area that could provide about 500 residential housing units valued at over 50 million dollars and industrial lands that could provide 3,200 jobs would be lost to reservoir uses at Prado. The Oak Street drain will provide some partial replacement land for development to offset the losses at Prado. It is vital that the Oak Street drain project be constructed concurrently with the acquisition and construction at Prado Dam and Reservoir.

In order to be able to proceed with authorization of the Santa Ana River project, the Boards of Supervisors of Orange, Riverside and San Bernardino Counties, working closely with the Los Angeles District of the Corps of Engineers, have reached agreement on authorization language which will allow construction to proceed on the lower two-thirds of the project, while continued study and resolution of issues relating to reservoir storage in the upper Santa Ana Basin are addressed and agreed to by the local sponsoring agencies. The language agreed to was endorsed by resolutions of each of the Boards of Supervisors. A copy of Resolution F83-10 by the Board of Supervisors of Riverside County Flood Control and Water Conservation District and endorsed by the Board of Supervisors of Riverside County has been submitted to your committee.

We, therefore, urge your committee to include the Santa Ana River project in the Water Resource project authorization bill recommended to the entire Senate with the authorization language set forth in the resolutions approved by the three Counties.

* * * * * * * * * * *

Santa Ana River
Flood Protection Agency
811 North Broadway, Suite 600 Santa Ana, California - 92701 Phone (714) 834-5142

April 22, 1983

U. S. Senate
Committee on Environment & Public Works
Subcommittee on Water Resources

Honorable James Abdnor, Chairman

Subject: S. 947 - Santa Ana River Flood Control Project Authorization

Mr. Chairman. Thank you for the opportunity of appearing before your Subcommittee this morning to testify on behalf of the Santa Ana River Flood Control Project. I represent an agency of 22-members including the County of Orange, the Orange County Flood Control District, the Orange County Water District, the Orange County Sanitation Districts and 18-cities of more than 1-million population on the Santa Ana River flood plain. While we fully support S. 947 and the authorization of the Santa Ana project, we would like to suggest some changes in the authorizing language itself to reflect local developments and agreements concerning the project.

First of all, Mr. Chairman, let me reiterate what the Corps of Engineers has told the Appropriations Committee so often during Phase I of this project - the Santa Ana River is the greatest flood threat west of the Mississippi, if not the entire United States today. The recent series of storms that battered the California coast served as a dramatic reminder of just how deadly that flood threat is, and yet, the storms we suffered this winter, together with the suffering and devastation they caused, were really only modest when compared with the potential destruction contained within a standard project flood.

If the time between each of the several storms hitting our coast this year had been shorter, or if the storms had dumped less of their waters on the coast and more on the inland mountain ranges, we would have suffered geometrically greater damage. We were lucky this year, but we cannot always expect to be so lucky.

With regard to the specific authorizing language, Mr. Chairman, I would like to join with the representatives of San Bernardino and Riverside counties in recommending to the Committee the language which the three local Boards of Supervisors have agreed upon. This compromise language would authorize the Corps of Engineers to begin work on the lower two-thirds of the All River Plan, that is, the raising of Prado Dam by 30 feet, and the channel improvements downstream of the dam along with various tangential improvements and mitigation features. The remaining one-third of the project, the provision of additional storage on the watershed above Prado Dam, would be subject to further Corps studies as to feasibility and alternatives. Not least among the attractive features of this revised language is the fact that it lowers the cost of the immediate project from $1.2 billion to the $800 million or less range. That is very significant to us at the local level in our consideration of how we shall pay for our portion of the project. I am sure that it is also noteworthy to this Committee, as well, in terms of the total dollar value of this omnibus authorization bill.

On the subject of local costs, Mr. Chairman, let me make my second principal point. We in Orange County support the Administration's belief that local beneficiaries of projects must bear some burden for the cost of those projects. We also believe that projects whose principal purpose is not for the protection of lives and property should be funded locally at a greater percentage than flood control projects. We in Orange County are ready to bear our fair share of the Santa Ana River Project. However, some parts of the project should have their local cost share calibrated differently than others. Specifically, I have in mind the costs of raising Prado Dam.

In 1941, when the Corps completed the construction of Prado Dam the standard storm against which it was designed to protect was based on the New Year's Day 1934 Montrose flood. That was their standard project flood, if you will, for Southern California, and Prado was built as a "state of the art" project. Nine years later, however, in 1943 a larger storm occurred in the San Gabriel Mountains and the Corps subsequently adopted this storm as its standard against which projects were, and are, to be measured in are area. Thus, the raising of Prado Dam now by 30 feet will give us a "state of the art" project - exactly what we thought we had 42 years ago when Prado was first built.

After the original construction of Prado extensive urban development occurred on the Santa Ana River flood plain. Approval of the development by local jurisdictions was based on a continuing assumption that Prado would function as planned. At no time prior to 1970 did the Corps reveal to Orange County officials that it had adopted new criteria, i.e., the 1943 storm, or that there was any reason to doubt the adequacy of the Prado Project to protect Orange County from a project flood. The Corps in fact from time to time, through its public relations activities, publically praised the project during those years when the population of Orange County was growing from less than 100,000 persons to more than one million.

I, therefore, would like to make the point that our local share of raising Prado Dam should be guided by the same cost-sharing principles that applied when the dam was constructed. It is not anyone's fault that the "state of the art" has changed, but after Prado is raised we will have no more than what we had in 1941 - a dam designed to protect against a standard storm for our area.

On the other hand, the one-third of the All River Project represented by the downstream channelization work is new construction based on new plans and new needs. It is not the result of revised definitions. Therefore, we are willing to assume the new, nationwide local cost share applicable to that portion of the project.

We are proud, Mr. Chairman, of the cooperation that has been achieved among local government, the Congress, and the Corps in bringing the Santa Ana Project this far. We know that with your support the federal investment made up until now will not be a wasted one. The protection afforded our people and property from the ravages of nature such as we have experienced recently should convince everyone that this project is much needed, long overdue, and a sound investment of federal and local resources.

Thank you for your attention.

George Osborne
George Osborne
Executive Director

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June 7, 1983

Honorable James Abdnor
Chairman
Subcommittee on Water Resources
Committee on Environment and Public Works
United States Senate
Washington, D.C. 20510

Dear Mr. Chairman:

As part of your Subcommittee's continuing hearings on S. 947 I would like to call your attention to the enclosed paper by George Osborne. Mr. Osborne is the executive director of the Santa Ana River Flood Protection Agency in Orange County, California and his comments are on the subject of cost sharing on flood control projects.

Since the Santa Ana River project is the largest single item in S. 947 I think Mr. Osborne's letter would make a valuable addition to your hearing record. Any cost sharing policy enacted by Congress will have a huge impact on Orange County as each one percent of this particular project involves some $10 million.

As the County of Orange's, and the Flood Protection Agency's, Washington, D.C. representative I would be happy to answer any questions you might have about Mr. Osborne's statement. Thank you for your attention to my request.

Sincerely,

James F. McConnell Jr.
James F. McConnell, Jr.

Enclosure

Santa Ana River
Flood Protection Agency
811 North Broadway, Suite 600 Santa Ana, California - 92701 Phone (714) 834-5142

March 15, 1983

Director
Office of Water Policy
U.S. Department of the Interior
Washington, D.C. 20240

Subject: Cabinet Council on Natural Resources and Environment proposed policy on cost sharing

Dear Sir:

This is to comment in particular on cost sharing of water projects involving repair or reconstruction of existing federal works.

A project of specific interest is the reconstruction of the Prado Dam unit of the proposed Santa Ana All River Project in Southern California. Historically a flood control dam was proposed on the Santa Ana River as early as 1925 to protect Orange County. Two local unsuccessful bond issue elections were held in the 1930's to finance construction. Following enactment of the Federal flood control act of 1936, the Santa Ana River Basin (and Orange County) Project was formulated by the Corps of Engineers and included a flood control dam and reservoir on the Santa Ana River upstream from Orange County in San Bernardino, and Riverside Counties. Following the disasterous flood of 1938, planning, design and construction of Prado Dam were undertaken by the Corps and completed in record time by 1941. The depth of study and the adequacy of the planning for the project are unknown to us locally except that the Corps revealed publically in 1970 that the reservoir has capacity to contain only a 70-year flood and that Orange County faces a serious hazard from larger floods.

It has been claimed by the Corps that the project was constructed in accord with the "state of the art" at that time and we have no reason to believe otherwise. It appears, however, that the reservoir was sized on the basis of a storm that produced the January 1, 1934 Montrose flood. In 1943 a larger storm occurred in the San Gabriel Mountains and at some subsequent date this new storm was adopted by the Corps for design of flood control reservoirs. It is the application of the 1943 storm to the Santa Ana watershed that indicates Prado Dam inadequacies.

Extensive urban development occurred on the historic Santa Ana River flood plain in Orange County from 1950 to 1970. Approval of the development by local jurisdictions was based on a continuing assumption that the Prado project would function as planned. At no time prior to 1970 did the Corps reveal to Orange County officials that it had adopted new criteria or that there was any reason to doubt the adequacy of the Prado Project to protect Orange County from a project flood. The Corps in fact from time to time, through its public relations activities, publically praised the project during those years of continuing development on the flood plain.

Attachment A

The proposed cost sharing policy when applied to the Santa Ana All River Plan would require Orange County paying $400,000,000 (35% of the cost of remedying the deficiency in Prado Dam including purchase of additional reservoir lands). Considering the circumstances, we believe that cost sharing at the same level as ordinary projects would be inappropriate for correcting Prado Dam deficiencies. An addition to the cost sharing policy to permit lesser local sharing under unusual or unique conditions such as Prado Dam reconstruction is recommended.

As to the level of local cost sharing for flood control projects to be adopted, we believe a better statement of justification is needed. While Orange County has long favored a partnership with the Federal Government on flood control projects, a rational explanation for the local level would greatly assist in obtaining the approval of local voters who will be asked to pay. In general we favor continuing the existing formula requiring the local sponsor to furnish lands, easements and rights of way (including bridges and utility relocation) on channel projects leaving the flood control benefits of reservoirs non-reimbursable. If a different formula is to be adopted our recommendation is that it be by congressional enactment and based on some logical basis and that "up front" requirements be replaced by a yearly payment plan extending over the planned life of the project.

The Santa Ana River Flood Protection Agency is a joint powers agency consisting of 18-cities on the Santa Ana River overflow area, the County of Orange, the Orange County Flood Control District, the Orange County Water District and the County Sanitation Districts of Orange County.

George Osborne
Executive Director

HGO:ps

cc: Chairman, SARFPA
NAUFMA
Director, EMA

NATIONAL WILDLIFE FEDERATION
1412 Sixteenth Street, N.W., Washington, D.C. 20036 202—797-6800

STATEMENT OF BENJAMIN C. DYSART, III
PRESIDENT & CHAIRMAN OF THE BOARD
NATIONAL WILDLIFE FEDERATION
BEFORE THE
SUBCOMMITTEE ON WATER RESOURCES
COMMITTEE ON ENVIRONMENT & PUBLIC WORKS
UNITED STATES SENATE

22 April 1983

Mr. Chairman and Members of the Subcommittee on Water Resources, my name is Ben Dysart. I am President and Chairman of the Board of the National Wildlife Federation, and appear before you this morning in this capacity to testity on S. 947, the "Water Resources Development Act of 1983." I am accompanied by Mr. Edward R. Osann, Director of NWF's Water Resources Program.

I am familiar with the water resources development business. I hold three degrees in civil, sanitary, and water resources engineering from Vanderbilt and Georgia Tech. I am former director of the Water Resources Engineering graduate program at Clemson University in South Carolina, where I am now the McQueen Quattlebaum Professor of Engineering. For the past 15 years, I have taught water resources planning at the graduate level.

I am past president of the Association of Environmental Engineering Professors, and have served in advisory and consulting roles to various Federal resource-management agencies, including several components of the Department of the Army's Civil Works Program. I have also served as consultant on technical and policy matters to major private-sector water, energy, and other resource development interests. The early years of my professional career were spent in industry with Union Carbide Corp. in responsible charge of engineering design and construction of major facilities. And in 1975-1976, I served as Science Advisor to the first Assistant Secretary of the Army for Civil Works.

As you know, Mr. Chairman, the Federation, with over 4.2 million members and supporters and 51 affiliate organizations, is the Nation's largest conservation organization. During the past decade alone, our membership has adopted more that 50 resolutions establishing Federation policy on various aspects of water resources conservation and development.

The Federation and its affiliates have a history of working with State officials and the Federal construction agencies to resolve differences over water projects or policies. We have commented on scores of projects; we have initiated rulemakings and policy changes; we have negotiated changes in specific projects; and, when all else failed, we have gone to court to enforce environmental planning requirements.

We have committed substantial time and effort to the initial development--and now the defense--of the Water Resources Council's procedures for the planning and evaluation of Federal water projects. We have strongly supported legislative efforts, on both appropriations and authorizations, to improve and redirect the Federal water resources development program.

TIME FOR A FRESH START

Mr. Chairman, the criticisms of Federal water resources development in this country are well known. All too often in the past, economically dubious projects have been constructed with inadequte regard for environmental values, gouging both the taxpayers and the landscape at the same time.

We can do better--and we are confident that the Corps of Engineers can do better--to manage both fiscal and natural resources. Facing the simultaneous demands of a massive Federal deficit and a lingering recessionary economy, the Congress must carefully target public sector investment, to increase the productivity of each dollar spent. In this light, the great expertise of the U.S. Army Corps of Engineers can be seen as nothing short of a national resource in and of itself--a resource that can be prudently managed for the greater welfare to the Nation and our people, or carelessly squandered by the mandates emanating from this Committee.

Frequently engineers--and an engineering attitude from the past--have been accused, rightly and wrongly, of bringing on or exacerbating many of our Nation's water and environmental problems. I am compelled, however, to observe that good engineering will be an absolutely necessary part of doing a better job in the future, and coping with some current problems.

Mr. Chairman, I am proud of the role that the National Wildlife Federation has played in recent years in helping to educate the public, the press, and the Congress as to both the realities and the shortcomings of various water projects and policies. But I want to assure you that we approach the task of identifying productive new avenues for the Corps' Civil Works program with equal enthusiam. The task facing this Committee is nothing less, in our view, than the rebuilding of a national political concensus around a mature and appropriately targeted water resources development program. We hope to help you build such a consensus.

Much in the way of water resources development remains to be accomplished by the public and the private sectors. Much of such a program will be quite different from that which was appropriate in the past.

Mr. Chairman, I am pleased to offer the support of the Federation for the authorization of a multi-billion dollar package of water resource development for the Army Corps of Engineers. The package that we envision is a combination of:

1) responsible development proposals that meet legitimate needs;

2) across-the-board water policy reforms, incorporating the best recommendations of Presidential commissions, academicians, private sector economists, State officials, and other observers who have taken an informed look at this program in the last decade; and
3) a major overhaul of specific Corps of Engineers programs, such as water supply and navigation, to manage the existing Federal investment on a more businesslike basis as well as to further conserve and protect our natural resources.

Alternatively, a return to nothing better than an old fashioned pork barrel bill with something for everyone--without regard to contemporary standards and realistic constraints--would squander an historic opportunity, and mire the Corps program once again in controversy and stalemate. We can do better. The Nation deserves better. The public demands that each of us do his part in producing a better product.

When you introduced S. 947, Mr. Chairman, you asked for witnesses at this hearing to identify controversial projects to which they are opposed. In the absence of serious attention to much needed policy reforms--cost sharing, cost recovery, wildlife mitigation, maintenance of strict evaluation criteria, and the like--all new water resources development proposals are controversial, and virtually none will have the broad support needed for authorization and implementation. Without such reforms, it will be difficult to convince the general public that they can or should have much confidence in the water development process.

Let me turn to Mr. Osann for a summary of specific key reforms and project selection criteria of interest to the Federation.

GENERAL WATER RESOURCES REFORM

State Cost-Sharing. The role of the states in water resources development is stressed by this and previous Administrations. However, a requirement for state cost-sharing--distinct from current or proposed non-federal participation requirements--would go far to achieve the oversight, evaluation, and prioritization of projects that the states should bring to this program. States should be required to contribute a minimum share of 10% of construction costs for all new water projects--in cash and not in kind-- while being reimbursed on a proportionate basis from any user fees collected by the Secretary of the Army.

Planning and Evaluation Principles. As indicated above, the Federation has been actively involved for many years in efforts to upgrade the planning and evaluation of Federal water projects. Since 1965, the development of criteria for project planning and evaluation has been the responsibility of the interagency Water Resources Council. Shortly after taking office, Interior Secretary Watt announced his intention to disband the Water Resources Council. In his capacity as chairman of this very same Council, Mr. Watt sought to repeal the "Principles and Standards" (P&S), the current rules for planning and evaluating new Federal water projects, promulgated in 1979 and 1980. Since October, 1982, all funds have been cut off for the Water Resources Council. And on February 3 of this year, President Reagan approved the repeal of the P&S as rules, effective July 8th, and their substitution with weaker, unenforceable guidelines. The loss of the Principles and Standards would be a severe blow to the effort to upgrade the quality of Federal water projects, and would result in a more politicized approach to water project evaluation and funding, current budgetary strictures notwithstanding.

Fish and Wildlife Mitigation. One of our major concerns is the equal and timely consideration of wildlife factors along with the economic and structural features of a project. The National Environmental Policy Act essentially mandates the integration of environmental concerns into the initial planning process. Section 102(2)(a) states that:

> . . .all agencies of the Federal Government shall utilize a systematic, interdisciplinary approach which will insure the integrated use of the natural and social sciences and the environmental design arts in planning and decision-making which may have an impact on man's environment.

Again, in the Fish and Wildlife Coordination Act, Congress expressed the same intent. This bill was passed:

> for the purpose of recognizing the vital contribution of our wildlife resources to the Nation, the increasing public interest and significance thereof due to expansion of our national economy and other factors, and to provide that wildlife conservation shall receive equal consideration and be coordinated with other features of water resource development.

Even though this is the stated policy of this Nation, the failure to provide clear regulations for the implementation of the general language of the Coordination Act has led to interagency friction and unreasonable delay in the provision of mitigation features.

All mitigation issues should be addressed and reconciled before the authorization of construction of any project. Otherwise, the appropriation of funds for constructing authorized project features, without concurrent funds for wildlife mitigation, becomes all but inevitable.

EXAMPLES OF FUNCTION BY FUNCTION POLICY INITIATIVES

Hydroelectric Power Development. Hydroelectric power is a relatively inexpensive form of energy, and a thoroughly mature technology. Further Federal subsidy is unnecessary, and is unsound fiscal and natural resource policy as well. New projects should be judged on the basis of the intended beneficiaries' willingness to invest in the project. Existing projects should be placed on a more businesslike basis, eliminating accounting gimmicks, shoddy recordkeeping, and questionable interpretations of statutory and administrative requirements.

Deep-Draft Navigation. Under the combined pressures of curtailed fiscal resources, mounting losses of fish and wildlife habitat, and heightened challenges to America's competitive position in world trade, Federal capital investment in deep-draft port improvements must be carefully targeted. As with hydropower, new projects should be judged on the basis of the intended beneficiaries' willingness to invest in the project. Users of existing projects should be required to assume an increasing share of operation and maintenance costs, including costs associated with the ocean dumping of dredged material. And planning and evaluation procedures must be maintained and improved since even full cost user fees do not obviate the need for economic analysis.

Beach Erosion Control. It is an inescapable fact that the sea level is rising and will probably continue to rise for the foreseeable future. Most of our shoreline stabilization has been and is being carried out without a full understanding of fundamental principles of shoreline processes. We now know that beaches may exist in equilibrium with an entire shoreline for many miles. An action that halts the flow of sand at one location may cause increased erosion at other locations. On coastal plain coasts, the beach exists in equilibrium with the inner continental shelf. Obtaining sand for beach nourishment from the shoreface or anywhere else within the dynamic system inevitably affects this equilibrium, and increases shoreline retreat. On cliffed coasts, erosion is episodic, occurring suddenly at widely spaced intervals of time. Along the southern California coast, sediment starvation due to dams on many rivers and slumping of soils heavy with irrigation water are complicating the situation.

Well over 2,000 miles of coastline are considered by the Corps to be in a state of critical erosion. If we build seawalls in a doomed effort to stop that erosion, it would cost from $1-6.3 billion. Just to pump sand on 2,000 miles of disappearing beach would cost $2 billion and would need to be repeated at 3 to 10 year intervals.

Even if these costs could be justified, the projects that are built are--over the long run--futile. Common stabilization projects, such as seawalls, rip rap, revetments, groins, and offshore breakwaters, have been shown to ultimately fail in protecting communities from beach retreat and destruction. A shoreline policy needs to be established that incorporates the latest scientific knowledge and recognizes erosion and shoreline retreat as inevitable.

PROJECT SELECTION CHECKLIST

1. Do projects have completed, favorable reports from the Chief of Engineers, and a final Environmental Impact Statement filed with EPA?
2. Do projects incorporate fish and wildlife mitigation features to the satisfaction of federal and state wildlife agencies?
3. Are flood control projects planned and evaluated in accordance with the revised Principles, Standards and Procedures of 1979-1980?
4. Are hydroelectric power projects not dependent upon increasing real fossil fuel costs for economic feasibility?
5. Are projects consistent with the most recent and reasonable projections for population growth, electric power demand, and water pricing and consumption levels?
6. Are beach erosion projects targeted to critical areas?
7. Are fish and wildlife mitigation plans proposed for projects that warrant construction by contemporary standards?
8. Do projects require or incorporate waivers of standard cost sharing requirements?

Mr. Chairman and Members of the Subcommittee, National Wildlife Federation thanks you for this opportunity to present these views. We will be happy to respond to any questions the Committee may have.

NATIONAL WILDLIFE FEDERATION
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RECOMMENDATIONS FOR ARMY CORPS OF ENGINEERS WATER RESOURCE DEVELOPMENT LEGISLATION

April 22, 1983

I. General Policy Reforms

- A. Cost Sharing by Non-Federal Interests
- B. Principles and Standards for Water Resources Plans
- C. Concurrent and Proportionate Mitigation of Fish and Wildlife Damages
- D. Water Quality Compliance
- E. Cost Ceilings
- F. Deauthorizations
- G. Post-Authorization Changes
- H. Unemployed Labor Resources
- I. Independent Project Review

II. Programmatic Policy Initiatives

- A. Dam Safety
- B. Navigation
- C. Flood Damage Reduction
- D. Beach Erosion Control
- E. Stream Bank Erosion Control
- F. Hydroelectric Power
- G. Recreation
- H. Water supply
- I. Fish and Wildlife

NWF

RECOMMENDATIONS FOR
ARMY CORPS OF ENGINEERS
WATER RESOURCE DEVELOPMENT LEGISLATION

April 22, 1983

I. General Policy Reforms

A. Cost Sharing by Non-Federal Interests

Require that non-Federal interests--the states and identifiable beneficiaries--share more of the cost of planning and implementing Corps projects, and separable features thereof, upon which construction has not yet begun by the date of enactment. Include within this requirement at least a 10% cash contribution from the affected state.

[Cost sharing is a proven way of achieving state and local involvement in the planning, evaluation, and prioritization of Federal capital projects of all types. The term "cost-sharing" refers to the methods by which the cost of water resources planning, construction, and operation are shared among various levels of government and the direct and indirect beneficiaries of these projects.

Federal cost-sharing policies must be consistent, equitable, and efficient. The policies must be consistent among programs, among purposes, among agencies, between structural and nonstructural measures, and between construction and operation. Equity and efficiency are achieved when project beneficiaries pay in accordance with the cost they impose and the benefits they receive.

By requiring states or other non-federal interests to put up some or all of the construction costs of new water projects, Congress will encourage states to prioritize water development projects and evaluate their respective benefits and costs as a double-check of the claims of the Corps. Massively expensive projects may be scaled back or eliminated altogether, while less costly nonstructural alternatives to traditional water development projects could receive new interest.]

B. Principles and Standards for Water Resources Plans

Reverse the Administration's impending repeal of the present Principles, Standards, and Procedures for Water Resources Planning and allow a new national water board with an independent chairperson to review the P & S and propose any changes deemed necessary.

[The repeal of the Water Resources Council's Principles and Standards (P & S) will become effective on July 8th. Far from being "cumbersome" as the Administration has charged, the P&S have been used to formulate scores of Corps projects since their codification in rule form in 1979 and 1980. The downgrading from rules to guidelines represents a set back for state agencies, local government, and other citizens attempting to maintain some oversight and involvement in water project planning and evaluation.

The new Principles and Guidelines will eliminate Environmental Quality (EQ) as a co-equal objective with National Economic Development (NED) in water resources planning. This downgrading of environmental considerations is contrary to long-standing views of Congress, going back at least as far as Senate Document 97, May 29, 1962.

The sole economic development objective of the new guidelines will eliminate the present systematic process to consider trade-offs between economic benefits and environmental amenities during planning and evaluation.

NWF and 800 other organizations, state agencies, and individuals have examined the new guidelines and found that they will offer Federal agencies a reprieve from developing cost-effective and environmentally sound water resources plans.]

C. Concurrent and Proportionate Mitigation of Fish and Wildlife Damages

Require that the lands and features necessary for the mitigation of project-induced damage to fish and wildlife habitat, in accordance with the Fish and Wildlife Coordination Act, be funded proportionately and be acquired and developed concurrently with other project features, for all projects upon which construction has not yet begun by the date of enactment.

[Fish and wildlife mitigation issues should be addressed and reconciled before the authorization of new projects and before the initiation of construction on authorized projects. The availability and quality of mitigation lands and the cost of their acquisition and development are questions that are highly relevant to a project's economic, environmental, and political feasibility. Yet as of September, 1982, 26 active Corps projects were under construction even without a mitigation plan having been prepared, let alone authorized or funded. Such mistakes should not be allowed to be repeated in the future.]

D. Water Quality Compliance

1. Require all existing Corps dams to employ best engineering practices to improve the quality of dam discharges.

   [Often, serious water quality problems, such as a low dissolved oxygen, can be remedied by fairly simple and inexpensive design modifications, such as hub baffles for turbines.]

2. Authorize the Chief to install water quality control featues and make related operational adjustments at Corps dams, for the purpose of restoring and maintaining indigenous fisheries.

   [While the private sector has invested billions in plant and equipment to make the nation's waters fishable and swimmable, Corps dams routinely discharge water of such low quality as to preclude the maintenance of an indigenous fishery. Such discharges are increasingly inappropriate when relatively inexpensive technology is available to address the unique water quality problems of discharges from large dams. The Corps should have the authority to retrofit its existing dams on a case by case basis.]

3. Require that all dams authorized in this bill and all authorized Corps dams upon which construction has not yet begun by the date of enactment, shall be designed and constructed to insure that discharges are in compliance with applicable state water quality standards.

[The resolution of water quality problems is generally easier and cheaper to accomplish before a facility is constructed, rather than after the fact. Indeed, this recognition has prompted the requirements for new facilities to meet tighter standards which are now embodied in both the Clean Air Act and the Clean Water Act. The Federal government ought not lag behind when it comes to the design and construction of new facilities to meet contemporary pollution control standards. Corps of Engineers dams should be no exception.]

E. Cost Ceilings

1. Establish a fixed cost ceiling, with appropriate allowance for construction cost fluctuation, for each project authorized for construction.

   [Previous Corps authorization bills contained reference to estimated costs, but not effective cost limitations. This type of open ended authorization has allowed not only massive cost overrruns, but also substantial project redesign and expansion. Congress cannot make credible budgetary decisions nor maintain adequate project oversight by enfranchising the Corps with such broad spending authority.]

2. Establish a single programmatic authorization ceiling on Corps construction (including the Mississippi River & Tributaries account) within which newly authorized projects are earmarked an expanding share.

   [S. 947 as introduced would for the first time establish by law an annual cap on Corps construction spending. We commend this effort, and suggest that it be further refined to give priority to the "new crop" of projects, intended to meet contemporary needs and planned in accordance with tighter evaluation criteria. Projects authorized many years or even decades ago, upon which little progress is made toward completion, should be subject to increased scrutiny and reduced priority in the annual appropriations process. In this way the Public Works Committees can regain control over the current direction and emphasis of the Corps construction program.]

F. Deauthorizations

1. Revise the existing "Section 12" process for the administrative deauthorization of unfunded projects, in accordance with the recent recommendations of the Assistant Secretary of the Army.

   [An enormous backlog of authorized but unbuilt projects--estimated by the General Accounting Office at $35.9 billion--leaves a great deal of slack in the Corps program. Obsolete planning and long-forgotten compromises justify many of these projects. All new construction should be required to meet contemporary standards of evaluation. Conversely, the deadwood should be cleared from the authorized backlog on an expedited basis, in the interest of security and elementary fairness to affected property owners and local governments in project areas.]

2. Establish a procedure for deauthorizing inactive water resource studies.

   [An accumulation of study directives from Congresses long past has left the Corps with standing authority to study the water resource needs of virtually every basin in the United States. If it is the intent of this committee that the Corps should have such blanket authority, then it should be so stated as a matter of law, obviating the need for the committee to enact resolutions modifying or expanding study authority in the future. Alternatively, inactive, unfunded studies can be reviewed and deauthorized in a manner analogous to the Section 12 process for unfunded projects. This will allow the Public Works Committees to more closely direct and oversee the current survey and investigation activity of the Corps.]

G. Post-Authorization Changes

Establish by statute the procedures and criteria by which the Chief of Engineers may exercise his discretion to make post-authorization changes in authorized projects.

[The expansion of numerous Corps projects beyond the scope envisioned in their original authorizing reports has been a recurring source of controversy and litigation. For example, the Stonewall Jackson Lake project in West Virginia has been nearly doubled in size by the Corps since it was authorized in 1966. In other instances, project purposes have been juggled as well. Congress should establish physical parameters beyond which the Corps must return to Congress for amended authority. Additionally, Congress should establish procedures to insure broad public awareness, involvement, and consensus, on the exercise of that remaining discretionary authority which must necessarily be left with the Chief.]

H. Unemployed Labor Resources

Require Federal agencies to supply Congress with current data on unemployed labor benefits for each water project and to actually hire local labor during construction.

[The social cost of a project is less than the market contract cost in situations in which otherwise unemployed or underemployed labor resources are used in project construction. The Principles and Standards limits the benefit allowed to projects in areas with "substantial and persistent unemployment" and outlines procedures to calculate the benefits (18 CFR 713.1203). The employment benefits are often overstated for projects planned before 1980. Projected local hires receive a higher benefit in the benefit-cost studies than do projected outside hires but there is no rule that requires local labor to be actually hired.]

I. Independent Project Review

Establish and fund an independent staff to provide an impartial technical review of proposed Federal and Federally assisted water resources plans and projects upon which construction has not yet begun by the date of enactment.

[Projects should be subject to analysis by qualified but disinterested staff in order to achieve greater quality control over authorizing documents and project justification material. The purpose of the reviews is to assure that water projects are planned in accordance wth established criteria and that relevant statutes are complied with. Such a review function, with a statutory basis for staffing, reporting requirements, and public access, could be housed at the National Research Council, the Water Resources Council, a new national water policy board, or even within the Office of Management and Budget, where this function is now nominally housed by Executive Order.]

II. Programmatic Policy Initiatives

A. Dam Safety

Authorize the Corps of Engineers to maintain the National Inventory of Dams.

> [The 1972 National Dam Safety Act called for an inventory of all dams in the United States. This resulted in an inventory of some 66,000 structures, with information on ownership, physical dimensions, hazard potential, and inspection data. Assembled over a period of four years and at a cost of nearly $100 million, the National Inventory database will steadily diminish in value if it is not maintained. Such authority has been requested by the Administration.]

B. Navigation

1. Phase in port-specific and segment-specific user fees for operation and maintenance activities and for reimbursement of future implementation costs of new projects.

   > [To the extent that users of all modes of transportation reimburse the government for expenditures made on their behalf, the pattern of long-run use and investment should shift to the most efficient modes. Thus, a principle benefit of user fees to recover costs of waterway use is a more efficient national transportation system. Another benefit is a reduction in net federal expeditures. The Congressional Budget office estimates revenues of over $4 billion a year with full cost recovery user fees for all freight transportation programs. Port-specific and segment-specific user fees are necessary so that efficiently used facilities do not subsidize high cost, inefficient ones.
   >
   > If port and waterway projects will improve efficiency and save money, then navigation interests so benefitting from these improvements should be willing to pay for them. If they're not, it's not clear why the Federal government should rush in with public funds.]

2. Require that navigation benefits be computed on the basis of the value of reduction of resources required to transport commodities rather than merely savings to shippers.

[Freight rates are not necessarily representative of the actual resource costs to move commodities. Federal waterway investments should be predicated on savings to the nation, not simply to individual shippers as mandated by Section 7(a) of Pub. L. 89-670. The criteria in Section 7(a) overstate both the savings compared to another mode and the traffic that would move on the waterway.]

3. Make innovative methods for offshore loading eligible for Federal participation on a comparable basis, where tests of public use and benefit are met.

   [Port facilities, including channels and structures, are not an end unto themselves, but rather means to enhance the economic transhipment of commodities. To provide the fullest range of alternative port improvement strategies, innovative methods for offloading should be eligible for evaluation and financing on the same basis as channel deepening. In so doing, the most efficient use of both economic and natural resources can be identified.]

C. Flood Damage Reduction

1. Direct the Secretary of the Army to report on the practicality of specific options for cost recovery from beneficiaries of Federal investment in flood damage reduction measures.

   [The Federal government has traditionally considered flood control to be a non-reimburseable purpose of Federal water projects. However, beneficiaries can often be identified and could be assessed a share of the costs. Property taxes may be one equitable method of repayment. Formation of a floodplain management district may be another. The Secretary should explore various reimbursement options and report back to Congress within one year.]

2. Establish consistency with the National Flood Insurance Program as a required item of local cooperation for all flood control projects upon which construction has not yet begun by the date of enactment.

[Federally funded flood control projects should only be provided if and when local land use regulations have been certified as adequate by the Flood Insurance Administration, and are in conformity with the Flood Disaster Protection Act of 1973. Local concern for flood damage reduction should be demonstrated before further Federal investments are made.]

D. Beach Erosion Control

Develop a contemporary statement of Congressional findings and national policy that emphasizes the limited application of measures such as beach renourishment, dune formation, vegetational plantings, and other methods that mimic nature. By using such measures, critical areas can be stabilized in the least destructive manner. Sites eligible for Federal participation should be limited to the following:

- military reservations,
- industrial complexes,
- harbor entrances and impacted adjacent shoreline,
- densely populated areas, and
- resort communities with high economic value already in place.

[Because of rising sea levels the American shore is moving, and no amount of rock, concrete, or sand will stop it. Instead, we must devise ways to live with the expected sea level rise of from 5 to 13 feet in the next century. For the most part the shoreline protection projects before the committee are not appropriate answers and will only exacerbate the problem. Most existing shoreline stabilization projects have been carried out without a full understanding of fundamental principles of shoreline processes. A shoreline policy needs to be established that incorporates the emerging scientific consensus recognizing shoreline retreat as inevitable.]

E. Stream Bank Erosion Control

Authorize the Corps to provide technical assistance for innovative methods to retard streambank failure and erosion to local governments requesting such assistance.

[Traditional methods of agricultural drainage have left a costly legacy of riparian destruction and substantial recurrent maintenance obligations. Innovative, labor intensive techniques now exist to harness the hydrologic force of existing watercourses--natural or man-made--for purposes of channel maintenance, bank stability, and habitat restoration. The Corps is well suited to provide limited technical assistance to financially-pressed local governments seeking to reduce costs associated with maintenance of drainageways.]

F. Hydroelectric Power

1. Enactment of relevant recommendations of Price-Waterhouse audits of Corps of Engineers hydropower operations, specifically:

   o Require the Corps to enter into agreements with the Federal power marketing agencies whereby all increments of the federal investment in power generating facilities are systematically amortized on an annual basis over the estimated average economic useful life of the facilities.

   [Repayment of the Federal investment on an individual project basis will make it possible to document the true financial status of each project. Such a change would eliminate the "highest interest-bearing first" repayment methodology criticized by Price-Waterhouse. This method allocates power revenues to those projects with the highest interest repayment rate first, so that recently built projects are "paid off" before earlier built ones. If power revenues are allocated equitably to all projects, it will shift interest costs now borne by the general taxpayer back to power users, where they belong.]

   o Require the Chief of Engineers to issue new regulations to require that a final cost allocation be prepared within one year after the completion of construction. These allocation reports should be subject to a formal, in-depth review by the Chief's office.

   [The preparation and approval of the "firm" or "final" cost allocation is often delayed several years after a project becomes operational. Such delays may preclude the timely recovery of reimburseable project costs.]

2. Direct the Secretary of the Army to identify opportunities, develop revenue estimates, and assess economic and environmental impacts of pricing hydroelectric power produced at Corps of Engineers dams at fair market value.

   [Hydroelectric prices are based on historical costs and arbitrarily low interest rates. These low prices cause additional quantities of power to be demanded. The cost of new generating facilities is much greater than the price consumers are willing to pay for incremental power. Thus, federal power facilities are overbuilt at the expense of the taxpayers and the environmental amenities of our nation's rivers.]

G. Recreation

1. Require the concurrent and proportionate planning and funding of authorized recreational features along with the other economic and structural features of a project, for all projects upon which construction has not yet begun by the date of enactment.

   [Too often, recreational features are not built until years after the primary portions of a Corps project have been in operation. Recreation opportunities are often lost as a result of project development, and thus it is desirable to have concurrent implementation of recreation features. The Corps may claim significant recreation benefits in order to justify a project, but subsequently fail to implement recreation plans.]

2. Authorize the Corps to recover a greater portion of Federal costs allocated to recreation through user fees.

   [The Department of the Army, unlike some other Federal, state, and local agencies, is severely limited in the charges it may impose for the use of recreation areas or facilities. Those who visit such areas should pay--and in many cases, are willing to pay--a higher share of the costs of constructing and maintaining these facilities than the general taxpayer. The administration has requested authority increase user fees at Corps recreation facilities.]

H. Water supply

1. Establish water conservation provisions as part of new or amended water supply contracts administered by the Corps.

   [Water supply is looming as the next resource crisis facing our country. The Corps program should gear up to stretch existing supplies in a cost-effective manner. A Corps regulation establishing modest water conservation programs as part of water supply contracts was repealed in 1981. In 1982, however, Congress established detailed water conservation contracting requirements for the Bureau of Reclamation by statute. The Corps conservation program should be placed on an equal basis with that of the Bureau.]

2. Make water conveyance and distribution projects eligible for Federal planning and construction assistance in the same manner as the storage of raw water supplies, coupled with comprehensive water conservatin requirements and appropriate standards for system repair, rate recovery, and reinvestment.

   [The repair of existing water distribution systems may frequently be found to be more economically efficient and environmentally acceptable than the damming of new raw water supplies. However, notwithstanding the expanding need for capital investment in existing systems, the Corps water supply program is currently limited to water storage incidental to multipurpose projects. This imbalance should be rectified while encouraging communities seeking such assistance to employ comprehensive and cost effective water conservation practices.]

3. Tighten the contracting and repayment requirements of the Water Supply Act through enactment of relevant recommendations of Price-Waterhouse audits of Corps of Engineers water supply operations, specifically:

   - Require more meaningful assurances from local interests regarding the use of future water supply storage and repayment of related investment within the life of the project.

- o Require execution of a contract with the user before construction begins.
- o Require that all annual operating and maintenance costs related to the water supply function be reimburseable from the user on an annual basis.
- o Require that interest charges be calculated from the first day of construction rather than from the first day the water is used.

  [Many Corps reservoirs have been built to provide M&I water supply storage, only to sit idle after reservoir filling with no water users and no water supply contracts. Adoption of these recommendations would eliminate many of the abuses regarding water supply outlined in the audit and related GAO reports.]

4. Insure full recovery for costs of Corps projects allocated to irrigation storage or conservation storage.

   [Historically, the interface between Corps water resource development and Federal reclamation law has been marked by uncertainty and legal ambiguity. Recent amendments to reclamation law left the repayment requirements for irrigation benefits from Corps projects at variance with the repayment requirements for other irrigation beneficiaries. The Corps should be required to ascertain any projected repayment shortfall, and develop detailed water marketing plans, in conjunction with the Secretary of the Interior, to insure the timely repayment of reimburseable investment in irrigation and conservation storage projects.]

I. Fish and Wildlife

1. Clarify the authority of the Corps to retrofit authorized projects with fish and wildlife mitigation lands, features, and/or operational measures developed pursuant to the Fish and Wildlife Coordination Act.

   [Federal water resource develpment projects have resulted in the loss of millions of acres of previously productive wildlife habitat. In the Lower Mississippi Valley alone, more than 6 million acres of bottomland hardwood forests were cleared between 1937 and 1977, largely as a result of Corps navigation and flood control projects. The Corps should be able to take prompt action to mitigate damages from existing projects, pursuant to plans proposed under the Fish and Wildlife Coordination Act. This implementation authority could be contingent upon adoption of resolutions of approval by the House and Senate Public Works Committee, to maintain oversight over mitigation costs and relationships to authorized project purposes.]

2. Require that a minimum of 5% of the total estimated cost of any feasibility study or post-authorization study be transferred to the Fish and Wildlife Service for the development of reports pursuant to the Fish and Wildlife Coordination Act, such sum to be available in the first year of study funding.

[Relatively small amounts of Corps funds are normally transferred to the Fish and Wildlife Service for the preparation of Coordination Act reports on the projects under study. Transfers of $3.1 million in FY 82 were made for this purpose. The interdisciplinary planning process would be improved if funding for the completion of Coordination Act reports were made available in the first year such Corps studies are initiated. Conversely, when fish and wildlife planning trails the planning for other project features and purposes, opportunities for maximizing the contribution of Corps projects to the conservation of fish and wildlife resources may be lost.]

ENVIRONMENTAL POLICY CENTER
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TESTIMONY OF DR. BRENT BLACKWELDER AND PETER CARLSON OF THE ENVIRONMENTAL POLICY CENTER BEFORE THE SENATE ENVIRONMENT AND PUBLIC WORKS COMMITTEE, SUBCOMMITTEE ON WATER RESOURCES, APRIL 22, 1983, CONCERNING S. 947 & WATER DEVELOPMENT PROJECTS

The Environmental Policy Center appreciates the opportunity to testify and commends the Subcommittee for its efforts in the last Congress to try to preserve a strong federal role in water research and in trying to create a replacement for the Water Resources Council.

Omnibus Approaches to Water Authorizations

The Environmental Policy Center favors dealing with water resource problems in smaller packages than the traditional multi-billion-dollar approach that the Congress has used in the past. These big bills tend to be so filled with miscellaneous matter that it is difficult to determine what, if any, relationship the provisions have to national water policy. Rather than trying the "Christmas Tree" approach which the House used in the 1970's, we recommend smaller packages like: a flood control bill, a navigation bill, a deauthorization bill, an environmental jobs bill, etc.

Deauthorizations

We commend the Committee for moving legislation deauthorizing a group of unneeded water projects in the last Congress. This was a precedent-setting action and we hope that more deauthorizations will follow on those projects which are clearly outmoded. In the last Congress we supported HR 2534 to streamline the existing deauthorizating process which was established in the Water Resources Development Act of 1974. This bill would also have provided for deauthorizing obsolete survey resolutions.

We support deauthorizations of the Cross-Florida Barge Canal, the Tocks Island Dam (PA/NJ), the Trexler Dam (PA), the Salt Creek Dam (OH), Lafayette (IN), the La Farge Dam (WI), to name a few of the central projects.

We urge the Committee to "deauthorize" the Columbia Dam of the TVA and to direct the TVA to pursue the non-dam alternative identified by its staff and described by the House Government Operations Committee in a special report on the project.

Flood Control

Over $15 billion has been spent this century on federal flood control projects but flood damages continue to mount, far faster than inflation. One would expect that with such lavish federal expenditures on flood control projects over the years that flood damages would be declining. Unfortunately, the federal flood control program is not guided on the principles of sound flood plain management. The attached graph tells the story of the growth of flood damages.

EPC is a project of the Environmental Policy Institute

Federal approaches to flood problems have concentrated almost exclusively on such methods as the building of dams, levees, and channel deepening and straightening. Federal projects have been justified on the basis of intensifying development in flood hazard areas. Little attention has been paid to alternative methods of dealing with floods such as zoning to keep development out of hazard areas, flood proofing of damageable structures, and relocation of homes and buildings out of the flood zone. The neglect of flood warning systems has led to unnecessary loss of life. These alternative methods of dealing with floods are receiving less than one percent of the Army Corps budget.

Traditional dam projects have promoted a false sense of security because flood waters can come down undammed tributaries or back-to-back rainfalls can completely fill a reservoir leaving no flood storage space. Sometimes flood waters fall between the dam and the damageable area downstream. The result has then been damages far in excess of what they would have been if an alternative approach with floodplain management had been used.

Some analysts point directly to Corps of Engineers work as exacerbating flood damages. Channelization and drainage of wetlands rushes water downstream. Construction of navigation works and levees along portions of the Mississippi River has transformed minor floods into major ones, according to Professor Charles Belt at St. Louis University. The 1973 flood crested at an all-time height at St. Louis but only a relatively minor volume of water was coming down the river. The Small Business Administration provides loans for rebuilding right back in the hazard area instead of requiring flood proofing of reconstruction or relocation to less hazardous areas. The SBA has thus set the stage for continuing disasters.

An examination of the pending budget request for Energy and Water Development Appropriations reveals why flood damages are getting worse. The project receiving the largest amount of money is the Tennessee-Tombigbee Waterway which has no flood control benefits whatsoever. Other funds are provided in the bill under the Mississippi River and Tributaries Account to finance the drainage of bottomland forests and swamps which hold back floodwaters and recharge groundwater. Two-thirds of the original hardwood bottomland forests in the Lower Mississippi have already been eliminated.

The only argument which the Corps of Engineers offers in reply to the charge that the federal flood control program has been mismanaged is that federal flood control projects have prevented five times as much damage as they cost to build, a very favorable benefit-cost ratio. This argument is specious because much of the damage being prevented is to structures which would never have been in the flood plain were it not for the federal project. Any flood control project can be made to look good if enough expensive development is located near the source of protection. But then along comes the rare or unusual flood and we have a catastrophe.

In reviewing the projects pending before the Committee, we have noted that only several involved predominantly nonstructural methods or environmental plans, such as Village Creek and Wilmington Harbor. The Environment and Public Works Committee should establish a policy that at a minimum, half of the flood control projects authorized at any one time should consist of predominantly nonstructural measures. Under the label of "nonstructural" we include: a) flood proofing of buildings, b) relocation out of the flood hazard area, c) flood warning systems, d) flood plain zoning, e) flood plain greenbelts, parks, and open space, f) protection of upstream wetlands and recharge areas which serve as a natural flood storage system, g) erection of poles or markers clearly showing to potential developers and buyers how high previous floods have risen, and h) various combinations of all these methods.

Cheaper Approaches to Flood Control

We wish to submit for the hearing record some material about the alternative approaches to stream channelization and straightening developed by George Palmiter and described in attached articles from the Wall Street Journal and Akron Beacon Journal. Palmiter has developed low-cost methods of cleaning out clogged streams, and he does this in an environmentally sound manner. He removes logjams, selectively cuts timber, uses logs and brush to deflect current away from erosing banks, etc. The attached information attests to the efficacy of his methods.

The Committee is considering a number of flood control projects which involve some channelization, straightening, or flood walls. It would be desirable to consider to what extent use of the Palmiter technique could substantially reduce the costs of these proposals and achieve the same or similar results.

Support for Fish and Wildlife Mitigation

There is a tremendous amount of catching up to do when it comes to mitigation of losses of fish and wildlife habitat as a result of dam and channelization projects. Construction has been continuing on the Tennessee-Tombigbee Waterway for a decade and there is still no mitigation plan approved or being carried out. The Committee is considering a variety of fish and wildlife mitigation plans on various projects which have been completed or are under construction. It is our judgement that this practice is contrary to the intent of the Fish and Wildlife Coordination Act. We believe that fish and wildlife mitigation should be an integral part of the cost of a project and should not require a separate benefit-cost ratio and authorization. If a project is going to damage these resources, then the cost of mitigating those damages is an integral part of the cost of the undertaking. If the project is so shaky economically that it cannot absorb those costs, then the project should not be built. We submit for the record an article from Water Spectrum by Oliver Houck entitled "Promises, Promises, Has Mitigation Failed ?" The attached table from that article clearly shows the failure to acquire need land for mitigation.

Wetland Losses

The nation is losing an estimated 300,000 acres of wetlands each year. Some of this loss stems directly from federal water development projects. The loss of bottomland hardwoods in the Lower Mississippi Valley has reached the critical stage, with only about 20% of the original bottomland hardwood swamps remaining. Loss of wetlands in the North Central United States has also been severe. These prairie potholes and marshes host roughly 40% of the breeding ducks in the lower 48 states.

The solution for this problem is to eliminate the funding of those water development projects of the Corps of Engineers and Soil Conservation Service which would eliminate wetlands directly or which would lead to the additional clearing of forested land for agriculture. Wetlands are so important that we should not be subsidizing their destruction. Wetlands not only provide vital habitat for fish and wildlife but they help protect water quality, control flooding, and recharge groundwater. We urge the Environment and Public Works Committee to establish a special task force to analyze and reevaluate the entire Mississippi River and Tributaries Account. While this account contains some projects which we support like the Old River Control Structure, it is also filled with drainage projects that do not merit further funding and that conflict with other objectives of this program.

User Fees and Ports and Canal Projects

Until legislation establishing comprehensive waterway user fees for inland and deepdraft channels is passes, the Environmental Policy Center opposes authorizations of new navigation projects. We have laid out in previous testimony our reasons for supporting a meaningful level of cost-sharing for navigation projects. We wish to emphasize that with respect to user fees for harbors we are strongly opposed to the unifrom fee approach embodied in Senator Hatfield's bill (S. 865). A port specific fee is necessary to separate the sound proposals from the unsound ones. The "fast track" provisions in S.865 are also unacceptable. While we believe that the schedule of approvals can be speeded up as suggested in the Moynihan bill in the last Congress, the approach taken in S.865 goes far beyond this and even directs courts on how to proceed.

We do not believe that the inland navigation projects pending before the Committee have been analyzed from the standpoint of making needed additions to the nation's transportation network. They have been evaluated from the narrow viewpoint of "savings to shippers" with a liik only at those who would benefit and not at those who would lose. Waht is the central question for the Committee to ask concerns the savings in resource costs to the nation from such projects. We urge the Committee to take this broad national persepctive.

Regional Inequalities

Water resource funds are maldistributed both by region and by need. Most of the federal water development dollars flow to the South and the West, while the serious infrastructure provlems of the Northeast and Midwest are neglected. Not only does one Arizona project receive more money than all of the 16 states from Minnesota across to Maine, but the projects that actually are built in the South and West do not match real needs. The General Accounting Office reported in August of 1981 that federal reservoirs are sitting with 15 million acre-feet of water uncontracted for and unused. This is an obvious testimony to construction of projects without reference to need.

We recommend that the Environment and Public Works Committee take steps to provide a greater balance in the distribution of water resource development dollars. Once such formula was provided in the Domenici-Moynihan legislation of last Congress based half on population and half on state geographic size. While this formula still has the defect of not being keyed to need, it does correct the regional imbalance. To focus on need we recommend that the Committee not fund any water supply projects for cities for municipalities which are not already practicing a comprehensive water efficiency improvement program. Such a program would consist of the following measures: 1) plumbing code changes are such that low-flow fixtures are required in new constuction and hot water pipes are insulated, 2) rate structures are such as to avoid encouraging waste, 3) a program of leak detection and repair is underway, 4) existing dwellings are being retrofitted with low-flow devices, 5) a public education program is in place, 6) all customers are metered, 7) groundwater management and watershed protection programs are in place, 8) an outdoor water use program is in effect, 9) recycling and reuse are permitted subject to health codes, and 10) drought contingency plans have been established. Communities which are serious about their water problems should have not trouble putting these efficiency improvements into place. For example, Philadelphia cut illegal hydrant use from 50 million gallons a day to 10 mpg and reduced peak demand by 200 mgd, using just a couple of the above measures.

It is sometimes thought that leakage problems in municipal systems are confined to the Northeast and Midwest. Dr. Gerald Meral, former Deputy Director of the California Department of Water Resources, testified that the average rate of unaccounted for water in 32 Rocky Mountain cities is 42%. The State of California is trying to curtail its rate of unaccounted for water which at 9.5% is far superior to most large cities' rates. However, it is poor when compared, for example, to the German cities of Dusseldorf, Berlin, and Frankfort which report 3 to 7% unaccounted for water.

Citizens Master Plan for the Upper Mississippi

Attached to this testimony are the highlights of the Master Plan prepared by environmental organizations working with more than 400 organizations and leaders who use and enjoy the resources of the Upper Mississippi. In contrast to the Upper Mississippi River Basin Commission which spent a lot of money but failed to prepare a truly comprehensive master plan for the river, the citizens plan is comprehensive and outlines actions which are necessary if this great resource is to survive for another century. Current levels of navigation are severely stressing the river ecosystem and heavy erosion from farmland is silting in the bankwaters along the river. We ask the Committee to address this problem and urge favorable action on the recommendations of the Citizens Master Plan.

Citizens Master Plan for the Upper Mississippi

Because the Upper Mississippi River Basin Commission failed to prepare a comprehensive master plan for managing the Upper Mississippi River, citizens groups throughout the Basin worked to prepare their own plan. The Citizens Master Plan is based on the input from questionaires sent to and discussions with over 400 organizations and leaders who use the river resource. Here are some of the key recommendations from the Citizens Master Plan:

- **A 10 year program to rehabilitate and restore fish and wildlife habitat on the Upper Mississippi and Illinois Rivers;**
- **A program to preserve natural areas and critical habitat to be jointly implemented by the Fish and Wildlife Service, the Corps of Enginners, and the state natural resource agencies;**
- **That the Fish And Wildlife Service be given increased authority to manage and protect wildlife refuges;**
- **That present authorized navigation capacity be maintained while habitat rehabilitation and recreation programs are developed;**
- **That a reassessment be made in the year 1995 of what constitutes a balanced river system;**
- **That commercial navigation user fees be implemented to recover the taxpayers' full cost of supporting the navigation system;**
- **That a fixed closed winter navigation season be set for the Upper Mississippi River System based on recommendations to be developed by the Fish and Wildlife Service and state resource agencies;**
- **That a recreational program be developed to address such issues as the expansion of the Great River Road concept, urban recreation, historical and archeological needs, wilderness protection, and a wild and scenic tributary system;**
- **That the federal, state, and local agricultural agencies cooperate to establish a program to stop excessive soil erosion;**
- **That reliance be placed on nonstructural flood control methods;**
- **That no new power plants be planned for contruction along the Upper Mississippi River System in light of revised energy demand projections,**

The environmental task force consisting of state and federal natural resource agencies state in its report to the Upper Mississippi River Basin Commission:

> "The Upper Mississippi River System as we know it will cease to exist within the next century, even if current levels of navigation traffic are maintained. No increase in commercial traffic should be considered until extensive...measures are implemented to correct existing problems."

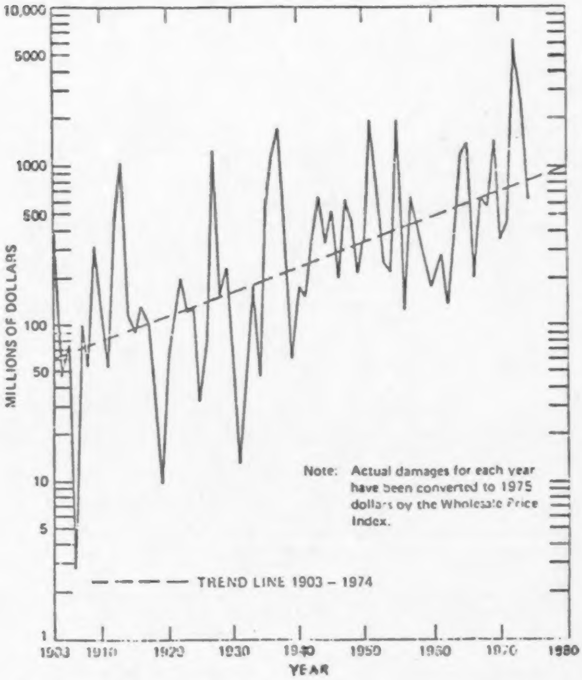
We concur wholeheartedly with this statement.

FLOOD LOSS ESTIMATES
FOR THE UNITED STATES

*Source: National
Science
Foundation*

*A Report on Flood
Hazard Mitigation*

September, 1980



Note: Actual damages for each year have been converted to 1975 dollars by the Wholesale Price Index.

The Colorado Story

Federal projects on the Colorado River have also taken an uncompensated toll in wildlife habitat.

Colorado River Storage Projects in Colorado

	Project	Wildlife Habitat Loss (uncompensated)
(C)	Boswick Park	2,596 AC
(C)	Florida	6,353 AC
(C)	Silt	2,781 AC
(C)	Paonia	2,564 AC
(C)	Smith Fork	1,717 AC
(A)	Dolores	12,350 AC
(A)	Savery-Pot Hook	16,823 AC*
(A)	Fruitland Mesa	12,524 AC
(A)	Dallas Creek	1,030 AC
(A)	West Divide	18,000 AC
(A)	San Miguel	27,742 AC
(A)	Animas Laplata	5,028 AC*
(C)	Curecanti Unit	8,200 AC
(C)	Navajo Unit	2,373 AC
	TOTAL	120,081 AC

*Colorado only
(C) Completed
(A) Authorized

In the South, the Numbers Tell the Mitigation Story*

	Direct Habitat Losses From Corps Water Projects	Mitigation Acreage Requested by USFWS	Mitigation Acreage Proposed and Authorized	Mitigation Acreage Purchased to date
Arkansas (7 projects.	711,423	561,810	83,500	6,000(approx.
Louisiana (7 projects)	243,122	125,468	12,800	12,800
Mississippi (9 projects)	281,500	189,800	15,000	15,000
TOTAL	1,236,045	877,078	111,300	33,800

*Based on USFWS data

From: "Promises, Promises: Has Mitigation Failed?" Oliver Houck. Water Spectrum, U.S. Army Corps of Engineers, Fall 1977.

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Using Nature's Way, A Restorer of Rivers Clears Muddy Water

* * *

He Plants Trees Along Banks; Johnny Appleseed Method Gets Awards and Criticism

By SCOTT KILMAN
Staff Reporter of THE WALL STREET JOURNAL

FAYETTE, Ohio – George Palmiter stands on a levee and gestures in disgust at this once-scenic section of the Tiffin River, which trickles through northwest Ohio some 30 miles west of Toledo.

The lazy stream has been "channelized"—trees uprooted from its banks, its riverbed dredged and debris stacked on the sides to prevent flooding of neighboring farmland. A sand bar, looming in the shallow channel, forces the current against the crumbling 20-foot-high banks, which surrender a share of the 12.1 million tons of Ohio stream banks lost annually to erosion.

Sections of the nearby St. Joseph River present an altogether different scene. Trees line the stable banks, and the current runs clear and deep. "The trees are the most important things," says Mr. Palmiter, who restored the once-clogged St. Joseph River in the mid-1970s. "If those nitwit stumblebums could see this, they'd know."

The "stumblebums" are the nation's water engineers, and Mr. Palmiter is challenging their decades-old tenet: Lazy rivers blocked with logs and silt should be dug into ditches and re-dredged from time to time.

Mr. Palmiter's deceptively simple alternative is attractive and inexpensive. He plants trees along river banks to help stop erosion. He also strategically places brush piles to direct the current to naturally clear the sand bars and other obstructions that engineers often attack with dredges and power shovels.

Restoring Swamp Creek

Since 1975, Mr. Palmiter has used federal grants to supervise the restoration of at least a dozen rivers. Last year he set up his own corporation to compete in the marketplace. In June, the company completed its first major job—restoring a 6¼-mile section of the Swamp Creek in southwestern Ohio, for $60,250.

But the 53-year-old, unassuming Mr. Palmiter, who began restoring rivers as a hobby, still does the work before and after his regular job as a railroad switchman, and he hasn't yet earned much money for his innovations. Among environmentalists, however, he is gaining a reputation as a "Johnny Appleseed" of the waterways.

In 1977, Mr. Palmiter got Outdoor Life magazine's annual conservation award for finding an alternative to what it calls the "gutterization" of small streams. In 1979, he received a public-service award from Princeton University for a string of restoration projects that included the Blanchard River in northwest Ohio—the river that inspired songwriter Tell Taylor to pen "Down By the Old Mill Stream." And now the U.S. Army Corps of Engineers is sponsoring a study of the George Palmiter method.

For all this notice, many professionals still give the cold shoulder to Mr. Palmiter's self-taught techniques. "It's a little bit like blowing your nose," scoffs Robert Kissler of the U.S. Soil Conservaton Service's Ohio office. "It provides relief, but only temporarily." Mr. Palmiter grumbles, "Everything I've ever proved, I proved it on my own with no damn help from anyone."

Clearing out clogged rivers and streams isn't just a backwater problem. Nationwide, 3.5 million miles of stream banks suffer from erosion, causing $340 million a year in damages to farmland, crops and other property. No exact figures are kept, but experts say thousands of miles of channels are dredged annually at a cost of millions of dollars. Since 1976, the Army Corps of Engineers has spent some $50 million just on studies of stream-bank erosion.

In this high-stakes world of mud and money, Mr. Palmiter is an unlikely innovator. He quit school after the 10th grade. He has worked for the Norfolk & Western Railway since he was 24. Last year his salary was $18,000. Like many old-time railroaders, he is a man of few words—and many of them are unprintable.

Scientific language baffles him. Trying to explain his methods, he stumbles over the word "hydrology" several times. And because of the skepticism he has encountered in the engineering fraternity, Mr. Palmiter is suspicious of academia. "Some people get so much education that they're stupid," he says.

In tiny Montpelier, Ohio, the town of 4,431 where Mr. Palmiter lives, most people aren't even aware of his growing renown as a restorer of rivers. His lawyer friend Robert Geesey notes that Mr. Palmiter is better known as the character who reported his own employer, the N&W, to environmental officials for spilling diesel fuel in 1979. (The railroad wasn't fined because there wasn't any indication that wildlife or fish were killed.)

An outdoorsman who enjoys hunting and canoeing, Mr. Palmiter began developing his methods when he became frustrated paddling down "channelized" streams so clogged with silt and logjams that his canoe frequently was grounded.

Historically, most rivers and streams in low-lying flatlands have been dredged to better drain the land and lessen flooding. Settlers in northwestern Ohio long ago dried up the so-called Black Swamp by deepening the channels of streams to carry more water away. Over the years, farmers and developers chopped down many trees along the banks, partly to provide more land for buildings and crops and partly to protect against fallen timbers blocking streams and causing flooding.

But removing the trees—which anchor down the soil on the banks—inevitably causes erosion. As the banks erode, silt is deposited in the channel and eventually chokes the stream. As a result, the channelized stream must be dredged in sections every two to five years and completely re-dredged every couple of decades. "The banks never heal up," Mr. Palmiter explains. "Like a sore, they keep festering up and need radical surgery every 20 years."

Clearing Destructive Logjams

After sprucing up a few streams for canoeing, Mr. Palmiter began his work in earnest. A Williams County, Ohio, commissioner who was a member of a canoe club with Mr. Palmiter helped Mr. Palmiter apply for an $80,000 federal grant offered to help communities rehabilitate rivers. In 1975 and 1976, Mr. Palmiter and youths hired with the grant money restored 80 miles on two rivers in the county.

The St. Joseph was one of those rivers, and a look at a branch of the river shows how his method works. For starters, Mr. Palmiter and his crew cleared destructive logjams. He points out one spot, for example, where a logjam on one side of the 30-foot-wide channel was forcing the current to angle across the river and erode the bank on the other side.

Mr. Palmiter built up protective brush on the eroding bank, using wire cable to anchor the brush. The brush both collected silt—replacing soil eroded in the past—and slowed the current so the bank wouldn't erode as easily again.

Clearing the logjam solved another problem. By slowing the flow of water just downstream from it, the logjam had prevented the current from washing away sediment and thus created a sand bar. The free-flowing water gradually washed away the sand bar and now, several years later, the channel runs down the middle of the stream. The once-eroding bank has a thick growth of willow saplings that Mr. Palmiter planted. As the willows mature, their roots weave through the bank, keeping it firm against high water.

The trees work in other subtle ways. The

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shade they cast prevents weeds from growing on the stream banks. Weeds can drape into the water and net the silt that forms sand bars. Also, the tiny tree-root filaments that extend into the current churn sediment like an eggbeater, so the sediment doesn't settle and eventually clog the channel.

The cost of that first project amounted to just $1,000 a mile, compared with tens of thousands of dollars a mile that it would have cost using conventional dredging methods. The local press dubbed him the "Montpelier River Rat," and Mr. Palmiter received inquiries from property owners and government agencies.

Dredging Is Faster

The savings on other projects also have been noteworthy. Mr. Palmiter says his methods generally cost just 10% or so of the cost of dredging.

But engineers contend his techniques have several drawbacks. For one thing, they work slowly. It can take months or years for water to naturally wash away sand bars and, in the interim, landowners face the danger of costly floods, engineers point out. Dredging is much faster. In addition, engineers question whether Mr. Palmiter's methods will work on large rivers. Rearranging logjams and brush won't divert heavy currents, they note.

"I think he's doing a lot of talking and doesn't have the proof yet," says Wallace Gillogly, who has supervised drainage projects in Darke County, Ohio, and who says Mr. Palmiter's techniques need years of study to prove their success.

The nearly completed study for the Army Corps of Engineers on the techniques is expected to conclude that they work on small rivers. But, like most government studies, it probably will call for more studies.

Mr. Palmiter is undaunted. He believes his company will become successful, and after that happens he has another dream: to become the Col. Sanders of the engineering crowd. Mr. Palmiter and his partner, lawyer Vincent Buchanan, already are drawing up plans to franchise the George Palmiter method.

Statement of
Jeffrey Stant, Legislative Representative
# of the
National Taxpayers Union

I am Jeffrey Stant, legislative representative for the National Taxpayers Union, the largest non-profit, non-partisan organization representing 120,000 taxpayers, working to reduce taxes and curb wasteful government spending. Thank you, Mr. Chairman and members of the committee for giving us this opportunity to present our views in regards to federal funding of the new water projects proposed in S.947, the Water Resources Development Act of 1983.

I should start by stating that a primary goal of the National Taxpayers Union is to secure ratification of the Balanced Budget-Tax Limitation Amendment. This amendment is designed to force the government to live within its means, set its priorities, and keep an honest accounting of its financing. In our view, the now unprecedented federal budget deficit must be curtailed if America is to realize a sustained economic recovery out of the deep present recession.

The financing of expensive water projects by the federal government without reimbursement is a major concern to our organization. The federal government, i.e. the American taxpayer should not have to pay for nonreimbursable projects which do not provide concrete national benefits. We are committed to the concept of user fees and the eradication of unwarranted taxpayer subsidies to any special interest segment of our society.

In particular, all costs for government sponsored water projects must be attributed to that segment where they rightly belong, the beneficiaries of the provided surface. If realistic benefit-cost analysis unequivacably shows greater produced benefit by building a project, then it is totally reasonable to expect beneficiaries to repay the full costs, (with interest), over a realistic time period.

There are a variety of different mechanisms available to project beneficiaries and state and local governments for financing the costs. The GAO has listed several possible alternatives in its May, 1981 funding report focusing on the Tennessee-Tombigbee Waterway. We would support states borrowing federal funds or issuing long-term bonds with repayment through user charges, or states financing the portions of projects through referendum-established state taxes. Greater effort should be geared towards obtaining direct contributions or increased user charges. Possible user charges include license fees, waterway fuel taxes, local property or business taxes, harbor and channel user fees, distance and weight tolls, public entrance fees and various other charges. While we advocate full reimbursement of costs, we view any partial funding leading to greater cost recovery from beneficiaries as a positive first step towards that goal.

Seventy-eight of the 101 new projects proposed in S.947 are categorized under a primary benefit of deep-draft navigation, inland and shallow-draft navigation or flood control for which current policy does not mandate reimbursement from project beneficiaries. Thus, of the projected total cost of $6 billion for construction of these projects, approximately $4.8 billion will be largely nonreimbursable paid for by the federal taxpayer or absorbed by the federal budget deficit.

This figure does not include the additional substantial costs for operation and maintenance of the 32 navigation projects proposed in S.947, costs which are also primarily nonreimbursable. The taxpayers deserve to know beforehand what their total investment will be including O & M costs. For example, the 1981 Office of Technology Assessment Technical Memorandum entitled Coal Exports And Port Development revealed substantial nonreimbursable annual costs required for port maintenance including an average of $200 million per year for current dredging operations at seaports. The annual O & M cost for the coal port in New Orleans was then cited at $19.5 million but projected to rise an additional $75 million from a proposed channel-deepening project. The OTA analysis did indicate that a general consensus was reached between the public and private sector supporting the need for a cost sharing policy for port users. We support the Reagan Administration's proposals advocating full or greater cost recovery for inland waterway, deep-draft port dredging projects and related maintenance.

Without a reimbursement policy that will eventually recoup the bulk of costs inherent and proposed in S.947, we strongly urge the committee not to move forward with the bill at this time. To proceed forward would be putting the cart before the horse.

We are not necessarily opposed to those seven hydro-power development projects in S.947 for which 100% cost reimbursement is mandated by present law. But in general, we question the wisdom of moving forward with additional water projects at a time when the federal budget crunch persists, and the General Accounting

Office has just stated that a $23 billion backlog exists in active projects funded for construction in FY 82. A January 26, 1983 GAO report indicated the backlog may never be eliminated if inflation picks up, additional revenues are not produced, or some projects not abandoned. It will certainly be increased if substantial federal expenditures from limited appropriations must be diverted to finance a large number of new projects.

On another facet of project cost, we agree with the theme of the GAO's December 6, 1982 report regarding cost sharing of feasibility studies with non-federal sponsors. If the costs for feasibility studies are shared with non-federal interests, studies with strong local support would most likely be completed, with state assistance if necessary, while those studies of marginal value would either be promptly terminated or never initiated in the first place.

We believe that the cost sharing proposed in S.1031 is a positive step towards providing greater non-federal involvement in project construction. However, taxpayers are still saddled with 65% of the cost for flood control and agricultural benefits, 50% of the cost of recreation and beach erosion control benefits, and 100% of navigation benefits under the terms of this bill making it a far less than adequate final solution to the cost allocation issue in our opinion.

We commend the U.S. Corps of Engineers in its recent efforts to secure greater cost sharing with "innovative financing" proposals for 14 new project starts. As with feasibility studies, the up-front financial commitment of non-federal sponsors should be a prime indicator of the economic viability of these new projects. We feel it is unfair to the taxpayer to proceed forward with any new water projects before resolving this important issue. Nonetheless, the negative response of the House Appropriations Committee to these Corps initiatives unfortunately places in doubt the political viability of significant cost sharing proposals in Congress at the present time.

With over 50,000 dams, 25,000 miles of navigable waterways, 540,000 bridges, and many millions of miles of roads and railroads in the national transportation network, there is no question that America has a gigantic infrastructure that requires enormous sums of capital to operate, maintain, and rebuild. Perhaps this task would not be so overwhelming to the limited financial resources of society if the federal government had not long ago embarked upon the precedent of subsidizing these items without eventual reimbursement. To ask the American taxpayer to subsidize 101 more water projects in the face of enormous pressure to reduce government spending is highly inconsistent and will only exacerbate the problem by increasing the quantity of infrastructure to rebuild instead of rebuilding what we already have. Initiating greater cost sharing via user fees to all project beneficiaries with the aim towards an eventual full reimbursement policy will rebuild our nation's infrastructure in the most equitable and efficient fashion while preserving the spirit of our free enterprise system.

"Cost-Sharing Policy on Water Resource Development"

Subcommittee on Water Resources
Committee on Environment and
Public Works
Congressman James Abnor, Chairman
May 18, 1983
Remarks by Governor Bill Clinton

Mr. Chairman, I very much appreciate this opportunity to make this written statement for inclusion in the record of the public hearing that you are conducting. I have a couple of general comments to make before I get to the specifics of S.947.

The nation needs a water bill. Arkansas needs water projects, for navigation, protection for public recreation, water supply, hydropower. We need to emphasize the development of multi-purpose projects. At the same time, we must be able to pay for these projects, preferably with all users or persons receiving the project benefits paying. Further, there should be sufficient flexibility in the system to enable Congress to add projects that are deemed to be in the national or regional interest. Finally, project loans should be made available by the federal to the state governments if the latter are unable to fund the projects.

Specifically, I turn my attention to S.947 for the rest of my comments. TITLE I identifies specific sums of money for obligation annually and these sums are not to be exceeded by the "Construction General" and "Flood Control, Mississippi River and Tributaries" accounts. I question if the obligation authority and the project programming and construction schedules would ever fit this neatly. It appears to me that we will have to establish project priorities. Even so, I fear that some much-needed projects will fall through the cracks. This single provision provides a very rigid system.

TITLE II (a) causes me some concern and in that regard I will offer two observations. The principles followed in cost sharing for deep draft will impact shallow draft navigation. The shallow draft system should complement the deep water system but not subsidize it.

TITLE II (b) I have read S.1031 and the Congressional Record of March 24, 1983, listing a lot of water projects. I am told this list came from the Chief of Engineers. I like and want the first two projects under II (b), Helena Harbor and the White River; however, I can't help but wonder about the status of the others (Congressional Record, March 24) and I keep remembering the annual obligation cap (Title I). I also know the $20,500,000 for the White River project needs about $5,000,000 added for the complete project. I would assume that the federal government will ask the state to pay for this. Is that correct? (Assume answer of yes). What are the terms? When is it due? Other questions arise, but that is enough to make my point. We need a national policy that tells us who pays what on the front end, or we will force the states to have the users subjected to double taxation.

I am actively engaged in seeking and developing innovative revenue sources for financing water projects. Mr. Chairman, using the White River as an example, we know this project will cost roughly $25,000,000. This project is multi-purpose, providing benefits to a multitude of users. What portion of this total cost is assignable to one group of beneficiaries such as navigation? I offer a suggestion from Professor Richard Ford of the University of Arkansas at Little Rock (copy attached).

Professor Ford states that the only objective method of determining cost allocation among beneficiaries is through the market mechanism, a national policy question which will require intensive investigation prior to formulation. This bill does not contain that required policy.

Our state desperately needs the Helena Harbor and the White River projects. We also need guidance from the federal government concerning a realistic assignment of costs to the users of the water projects.

I thank you for the opportunity you have provided me. I believe the water issue is one of the most important facing the nation at this time. The "who pays" issue and how it is implemented must be resolved if we are to avoid a problem that will be far more devastating to the nation in 2000 than the oil crisis was in the 1970's.

A WORKING PAPER FROM
THE DEPARTMENT OF ECONOMICS
AND FINANCE
THE UNIVERSITY OF ARKANSAS
AT LITTLE ROCK

MARKET DETERMINED COSTS:

A Value-Free Method for Identifying the Costs of the Inland Waterway System Assignable to the Navigational Industry

by
Richard K. Ford
Assistant Professor of Economics

8 April 1983

INTRODUCTION

A national debate concerning users fees for the Inland Waterway System was initiated in earnest with the Congressional consideration of the "Inland Waterways Revenue Act of 1978" (Public Law 95-502) which was signed by President Carter in 1978. The original question asked IF a tax should be levied on the beneficiaries of the Inland Waterway System. The current stage of this continuing debate deals with HOW LARGE of a tax the inland waterway transportation industry should pay. In particular, the debate is focused on the selection of an agreeable percentage rate of the operating and maintenance, and capital construction Federal expenditures assignable to the navigation function of the system.

Recently, the Reagan administration drafted a legislative bill for submission to congress which would seek to recover 70 percent of these expenditures. In the past, similar drafts were considered that proposed a 100 percent recovery of these same costs.

The reduction of the recovery percentage rate is a quantifiably observable result of the political process as it addresses the "how large" question within this continuing debate. There are two points of interest concerned with the lowering of this rate: (A) the reasoning for reducing the PERCENTAGE RATE, and (B) the fact that both proposed rates (i.e., 100 and 70 percent) are applied to the same AMOUNT -- the federal expenditures assignable to the commercial navigation portion of the Inland Waterway System. Both of these points are intertwined with an economic concept associated with the Inland Waterway System -- the JOINT-PRODUCT problem. Before burdening the reader any further an outlined definition of these phrases will be presented.

* The RATE DEDUCTION rational given by Mr. Gianelli ,Secretary of the Army, Civil Works, for the reduction of the proposed rate of recovery from 100 to 70 percent is that consideration for the "...federal interests in a number of areas, including defense, national security, international trade, and a navigation infrastructure essential to the nation's economic well-being..." is taken into account.

* The AMOUNT to which the percentage rate of recovery is applied against is the "Corps expenditures for operation and maintenance, and capital construction" of the Inland Waterway Navigational System. The interesting fact here is that historical (or sunk) costs are included with future operating costs AND that the magnitude of these expenditures has not been clearly established. In fact, the accounting of these expenditures is arbitrary, since the assignment of an expenditure to a navigation account is accomplished by the U.S. Army Corps of Engineers with guidelines from congress. The point is that the tax burden could drastically change if the magnitude of the this navigation account shifts due to a different set of arbitrary guidelines.

* The JOINT-PRODUCT problem is an economic concept which is observed when two or more economic goods or services are generated from the same production process and the separation of input costs used to produce each of them is virtually impossible. In other words, the problem is that there is no objective method to assign the costs of production to the different products. The typical solution to this problem is to derive a consistent (although arbitrary) method based some on non-cost related functions when assigning the input costs to the various outputs.

THE PROBLEM

The purpose of this paper is to set forth an objective method for determining the amount of federal expenditures required for the commercial navigation function of the Inland Waterway System. If this task can be accomplished, then the percent of this amount to be recovered from the commercial waterway users can be debated in the political arena. First, however, one additional important limiting condition must be established. Namely, that the construction costs of the Inland Waterway System must be excluded from the recoverable federal expenditures for the navigational function assigned to the commercial users. The reasons for excluding the construction expenditures have been set forth in a research paper written by the author late last year. (i.e. NAVIGATIONAL COST ALLOCATION - THE ARKANSAS RIVER EXAMPLE, Published by the Industrial Research and Extension Center of Arkansas, December 1982.)

The result of excluding the historical costs focus the task of this paper on proposing an objective method of quantifying the operating and maintenance federal expenditures of the Inland Waterway System which are required for its commercial navigational function. In the interest of consistencies, the invention of a term to describe the last part of the preceding sentence is appropriate. Therefore, the term 'THE BASE' will hereafter mean "the operating and maintenance federal expenditures of the Inland Waterway System which are required for its commercial navigational function."

THE SOLUTION

The national debate concerning user fees leveled on the Inland Waterway System's beneficiaries can be clarified if the 'THE BASE' (i.e. "the operating and maintenance federal expenditures of the Inland Waterway System which are required for its commercial navigational function) was known. The market system can objectively quantify 'THE BASE'. Two of the outstanding characteristics of the market system is its ability to make value free decision that are economically efficient. If individuals within the market system owned the Inland Waterway System, the determination of the 'THE BASE' would not be necessary since the negotiations between the owner and the user would establish a market price without the requirement of an elaborate allocating system. In addition, since the market system operates on the profit motive, one could be assured that the lowest costs possible would be attained. Although this may not be true at one specific point in time, over the long run, the desire for profits, given a competitive system would assure that marketable services would be produced and that these marketable services would be provided at the lowest cost.

Given these desirable attributes of the market system, one may be encouraged to immediately transfer the entire ownership of the Inland Waterway System to the private sector. However, trade-offs will be associated with such a transfer. In order to conceptualize the trade-offs associated with public verse private ownership of the Inland Waterway System, perhaps a simple continuum schematic diagram would help. One could think about a line of some given length with one end labeled "private ownership", and the other labeled "public ownership". Movement along this continuum represents the ownership distribution of a production facility, or in this case the portion of the Inland Waterway System which is privately and publicly owned. Currently, the majority of the inland waterway transportation system is owned by the Federal government (i.e., by the public sector). The observant reader will notice that the barges and pushboats which are part of this production facility are privately owned. However, the vast majority of the system is owned and operated by the U.S. Army Corps of Engineers, an agency of the public sector.

TRADE-OFFS ASSOCIATED WITH THE
OWNERSHIP OF PRODUCTION FACILITIES

```
*******************************************************
*                                                     *
*   Public                                  Private   *
*   Ownership                               Ownership *
*                                                     *
*   !----X-----------------------------------------!  *
*                                                     *
*   + Socially                          + Economic    *
*      Determined Goals                   Efficiency  *
*                                                     *
*   + Political                         + Profit      *
*      Motive                              Motive     *
*                                                     *
*******************************************************
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The location of the "X" in the schematic above represents the current ownership distribution of the inland water transportation system. If a proportional change of ownership were considered for the Inland Waterway System, one could think of the "X" moving, either to the right or left, depending upon the ownership change contemplated. Furthermore, the effects of such a change can be hypothesized based on economic principles. If a movement to the right was considered, one associated benefit would be economic efficiency, or the least cost means to provide the production facility. (Notice that the cost would be lowered, but the market price may or may not follow suite depending on the government regulations of associated industries and other factors.) The accompanying trade-off would be the elimination of certain services that are external to the market system but are never-the-less considered to be socially desirable. Some of these socially desirable services currently provided by the Inland Waterway System are recreational, environmental and flood control concerns.

A solution to this dilemma is to contract the responsibility for the separate functions of the Inland Waterway System. If the System's transportation function was segregated and assigned to the private sector in sufficiently large blocks, of both river mileage and time, a controlled transfer of responsibility could be accomplished in such a way to take advantage of the market systems benefits while maintaining the socially desirable goals of the system. In particular, the task of maintaining and operating the navigational function for segments of the Inland Waterway System could be transferred to the private sector. Obviously, specific conditions would have to be established to insure that the job is adequately accomplished. However, if only the specific function of navigational operation and maintenance was transferred, the private sector contractor would not be willing to perform any task that was not a requirement of that function. This cost separation method would remove the arbitrary decisions that currently are included within the governments estimates of 'THE BASE'. That is, an objective method for identifying the operating and maintenance federal expenditures of the Inland Waterway System which are required for its commercial navigational function would be established.

One means of implementing this proposed method is to contract out the operation and maintenance of a specific section of Inland Waterway System, for a specific time period. For example, the stretch of the Arkansas Navigational System from the Mississippi River to Little Rock could be assigned to a private firm for five years. This firm would be responsible for maintaining and operating the system for all matters necessary to accommodate commercial navigation on the river. All other functions of the system would not be their concern, such as recreational facilities, environmental concerns, and flood control operations. Although much of this type of navigational function of the Inland Waterway System which are to be specified in the contract. If the navigational industry is provided an opportunity to assist in developing the contract requirements, not only should the contract be better defined, but some sense of fairness concerning 'THE BASE' may also be established. From a practical point of view, it seems logical that since the members of the commercial industry will be required to pay for the operation and maintenance of the system, they should also be given a voice in the process of establishing the amount of maintenance and the level of operation that will be provided.

Even though the contract method should lower 'THE BASE' as compared to its current level, due to the introduction of a profit motive and whatever economies of scale that may be available, the rate question will remain viable. That is, a 100 percent rate of 'THE BASE' will still produce an erroneously high recovery charge. This is due to the fact that the economic joint product problem is still entangled within the Inland Waterway System. The operation and maintenance of the navigational system will inevitably produce conditions favorable for other beneficiaries. In order to prevent the non-navigation beneficiaries form becoming recipients of the navigational industry's tax revenues, or "free-riders", a judgmental process will still be required concerning the appropriate percentage rate of 'THE BASE' to charge the inland waterway industry.

maintenance currently conducted on the system is already performed by private contractors, increasing the scope of the contract would allow the private firm to take advantage of any economies of scale that may be present. In addition, the private firm would be driven by the profit motive to reduce the amount of overhead to a bare minimum in order to maximize its return. If any reduction of costs are achieved by this method, as compared to the current Corps system which does not operate by the profit motive, these savings should be observed as consecutive bid prices are lowered.

CONDITIONS AND LIMITATIONS

The national debate concerning user fees for the inland waterway industry can be assisted by objectively determining 'THE BASE'. However, this solution is not without its limitations and shortcomings. In particular two important points must be made.

First of all, contracting for the navigational operating and maintenance function will only assist in quantifying 'THE BASE' by an objective means as opposed to the arbitrary method currently employed. Caution must be exercised with this proposed method so that only the navigation function is contracted. To ensure that extraneous contract requirements are not included, the navigational industry, (i.e., the commercial users), should be consulted when establishing the parameters of the

CONCLUSIONS

The national debate concerning user fees for the commercial beneficiaries of the Inland Waterway system is currently focused on determining an appropriate total amount to collect. This is being accomplished by considering various proportions of a base figure. That is some percent of a dollar amount will yield the total revenues to be collected from the inland waterway navigational industry. Only the percentage portion of this equation seems to be currently debated. This paper suggest that the base figure should also be considered. The base figure as considered herein has been labeled 'THE BASE' and defined as "the operating and maintenance federal expenditures of the Inland Waterway System which are required for its commercial navigational function."

The reason for including 'THE BASE' within the national debate is that the Inland Waterway System contains a "joint product" economic problem. That is, it is exptemely difficult to objectively assign input costs to the various outputs. Currently the U.S. Army Corps of Engineers attempts to do this through an elaborate accounting system. However, the rules and guidelines of this system are arbitrary which produces a consistent but never-the-less arbitrary figure which is reported to be the federal expenditures for the navigation function of the system.

In an attempt to objectively determine 'THE BASE', this paper proposes for consideration the possibility of employing the market system. In particular, the operation and maintenance of the navigation function of the Inland Waterway System could be contracted in an effort to inject the private sectors ability to objectively quantify dollar amounts. It is suggested that if only the navigational portion of the operation and maintenance of the Inland Waterway System were contracted for, a method of avoiding arbitrary decisions within the determination of the base figure could be avoided.

It should be emphasized that this paper represents only an outline of the problem and attempts to conceptualized one possible solution. Numerous empirical questions require answering before the contracting solution presented herein should be pursued. However, this papers primary contribution may be to simply inject a discussion of the HOW the base figure will be determined into the national debate concerning inland navigational user fees.

ASSOCIATION
OF AMERICAN
RAILROADS

William H. Dempsey
President

April 19, 1983

The Honorable James Abdnor
United States Senate
Washington, D.C. 20510

Dear Senator Abdnor:

I would like to submit for the record the position of the freight railroad industry regarding federal water projects for commercial navigation.

In short, we do not oppose or support any commercial navigation projects as long as the users pay for them. It is not the business of the freight railroads to suggest how any user groups should seek to influence the expenditure of their own fees. We have testified to this effect previously before the Congress, and we will continue to stand by that position.

This position -- one we consider consistent with the development of sound economic policy -- nonetheless carries a risk. New locks at Gallipolis, a new lock at Bonneville, and a second replacement lock at L&D 26 are all projects that have competitive impact on the freight railroad industry. They are also serious water project candidates before the 98th Congress and are earnestly sought by the inland waterway industry. Our stance of non-opposition could not be maintained if there is compromise on the issue of full cost recovery. (Continued funding of the Tennessee-Tombigbee and other projects poses similar problems.)

We understand that your Committee will conduct hearings later in this legislative session (at a date yet undetermined) on navigation policy issues. At that time, we will request the opportunity to present oral testimony confirming our above stated position on specific projects as well as our national policy concerns.

In the interim, if we may further assist in this matter of national importance, please do not hesitate to call upon us.

Sincerely,

W. H. Dempsey

1920 L Street, N.W., Washington, D.C. 20036 (202) 835-9126

NRECA NATIONAL RURAL ELECTRIC COOPERATIVE ASSOCIATION
1800 Massachusetts Avenue, N.W.
Washington, D.C. 20036/202-857-9500

July 6, 1983

Honorable James Abdnor
Chairman, Subcommittee on Water Resources
Committee on Environment and Public Works
United States Senate
Washington, D.C. 20510

Dear Mr. Chairman:

Enclosed is NRECA's statement in support of Senate Bill 947. The Subcommittee is to be commended for preparation of this omnibus water resources bill which has been needed for many years.

We have listed a number of additional projects which we support and urge that they be added to the bill. Please include our statement in the record of the hearings on this important legislation.

Sincerely,

Morgan D. Dubrow
Senior Staff Engineer
Energy and Environmental
Policy Department

Enclosures

Statement of Morgan D. Dubrow
National Rural Electric Cooperative Association
on S. 947
Before the Subcommittee on Water Resources
Committee on Environment and Public Works
July 7, 1983

Mr. Chairman and members of the Subcommittee, my name is Morgan D. Dubrow, Senior Staff Engineer of the National Rural Electric Cooperative Association (NRECA). We appreciate this opportunity to present a statement to this Subcommittee expressing our views on S. 947, a bill to authorize the United States Army Corps of Engineers to construct various projects for improvements to rivers and harbors of the United States, and for other purposes.

NRECA is a national service organization representing more than 1,000 rural electric systems in 46 states. These systems, mostly all cooperatives, serve more than 25 million consumers in 2600 of the 3100 counties in the United States. Members of NRECA provide electricity to over 70 percent of the land area of this nation.

NRECA is pleased to submit a statement in support of this authorization bill. As the Subcommittee members know, we have not had an omnibus and harbors bill since 1976. We are delighted to support the projects set out in TITLE II of this bill. In accordance with our long established policy, NRECA champions the Federal development of our water resources. We recognize that we must improve our harbors and waterways to provide our farmers and ranchers, who in the main are our consumers, a better opportunity to export grain and other commodities.

Many of our generation and transmission cooperatives also utilize these waterways for the transportation of coal as fuel for our steam electric power plants. We are particularly pleased to support the authorization of hydro power development which will add directly to the power supply of many of our member systems in Alaska, Arkansas, Georgia, Idaho, Montana, Oklahoma, Washington and Oregon.

We respectfully submit to the Subcommittee for authorization the following list of additional projects which are supported by our members:

Gregory County Hydro Pumped Storage, South Dakota
Mississippi River Ship Channel, Gulf to Baton Rouge, Louisiana
Mississippi River at St. Paul, Minnesota - Flood Control
Helena and Vicinity, Arkansas - Flood Control
Fairfield, Ohio - Flood Control
Brush Creek and Tributaries, Missouri and Kansas - Flood Control
Davenport, Iowa - Flood Control
Des Moines River Basin, Iowa - Flood Control
Downstream Measures at Harry S Truman Dam, Missouri- Fish and Wildlife Mitigation
Mississippi River, Green Bay Levee and Drainage District No. 2, Iowa - Flood Control
Perry Creek, Iowa - Flood Control
St. Johns Bayou and New Madrid Floodway, Missouri - Flood Control
Trimble Wildlife Area, Replacement, Smithfield Reservoir, Missouri - Fish and Wildlife Mitigation
Maline Creek, Missouri - Flood Control
Gulf Port Harbor, Mississippi

To illustrate the extent of our support for multipurpose water resources in the United States, attached are the most recent resolutions dealing with this subject which were unanimously adopted at our 41st annual meeting in Las Vegas, Nevada on February 2, 1983.

We call attention to and seek support for S. 1255, introduced on May 9, 1983, by Senator Specter of Pennsylvania. This is "a bill to establish the Northeast-Midwest States Federal Hydropower Financing Authority". This bill would establish a Government corporation that would make or guarantee loans up to 70 percent of the initial total estimated cost of selected hydropower developments in the Northeast-Midwest States.

It has been the long established policy of our Association to advocate and support the development of multiple-purpose water resource projects by the Federal

Government. This has been reaffirmed at our annual meetings for many years. Our resolution entitled "Resource Development and Federal Multiple-Purpose Projects" lists projects in almost every one of the 50 states. Our goal, however, is to make reasonably priced electricity available to our consumers. It is for this reason that we strongly support the Specter bill.

In closing, we urge the Congress to appropriate the funds necessary to complete the planning, the environmental and feasibility studies, and to authorize and appropriate funds to construct all feasible multipurpose projects as rapidly as practical, and also to install electric generation in all existing non-hydroelectric projects where feasible.

We appreciate the opportunity of expressing our views on this important legislation.

Attachments

CHANGE OF PURPOSES, SAVANNAH RIVER PROJECTS—There is currently under consideration a proposal to divert water out of the three federal hydroelectric reservoir projects on the Savannah River for industrial, municipal and other public uses in an adjoining state.

NRECA opposes any change of purpose as previously authorized by the United States Congress for the three federal reservoir projects on the Savannah River unless Congressional hearings on any such proposal shall have first been conducted by the Congress, with all affected parties being given opportunity to be heard, and unless thereafter authorized by an act of Congress.(H-1983)

LIBBY ADDITIONAL UNITS AND RE-REGULATIONS DAM (LAURD)—The Libby Dam is a major hydro storage project on the Kootenai River in northwestern Montana presently having 483 MW of peaking capacity. The addition of four new units will give a total peaking capacity of 966 MW. Court action halted construction of the re-regulating dam which would have an installed capacity of 88 MW. Subsequently, Congress has placed constraints on expenditures by the U.S. Corps of Engineers, which prevents adding generators to the already-installed turbines for units 6, 7 and 8.

NRECA regrets that information has been disseminated by those opposing LAURD which considers only the cost of project energy without full appreciation of the value of LAURD for production of peaking power.

NRECA believes that LAURD is an essential project for generation of peaking power at a reasonable economic and environmental cost, and that completion of the project benefits the entire Pacific Northwest region and the nation.

NRECA therefore (1) urges all cooperatives in their respective regions to inform their members of Congress of the benefits of this project, and (2) urges Congress to authorize the Libby re-regulating dam.(H-1983)

SPREWELL BLUFF HYDROELECTRIC SITE—The United States, for the past several years, has been importing oil from many foreign countries to be used for different purposes, including power generation, even though we still have numerous feasible hydroelectric sites in our country that should be developed.

In Georgia, on the Flint River, we have a most likely and feasible site known as Sprewell Bluff. This site has been under study for a number of years, but plans are now dormant due to lack of interest.

It is our desire at this time to resume the planning of this particular project, looking toward the day when it will be a viable part of the hydro system of our region.

We urge the Governors of Georgia and adjoining states to publicly support this project. Furthermore, we call upon the President of the United States, the Departments of Interior/Energy, and the members of Congress from Georgia and adjoining state to give their wholehearted support to this undertaking; thus giving us another unit of electrical power for the preference customers of the region.(H-1983)

DICKEY-LINCOLN SCHOOL PROJECT—Last year upon the recommendation of the Maine Congressional delegation, the Senate elected to de-authorize this valuable multi-purpose project. Future hydro development particularly is worthwhile in the Northeast where none of the 3,330,000 kilowatt potential yet has been developed.

The Dickey-Lincoln School project offers the greatest benefit cost potential of regional hydro prospects. Dickey is an incontestable valuable resource and a low-cost investment for assuring an adequate regional supply of peaking power for New England in the years ahead.

We urge the Congress to reject the de-authorization of the Dickey-Lincoln School and appropriate the necessary funds to construct this much needed multi-purpose project.(H-1983)

WATERWAY USER FEES—In 1978, Congress enacted a phased diesel fuel tax used for commercial navigation beginning at 4 cents per gallon and rising to 10 cents in 1985. The present Administration is advocating a dramatic increase in new user charges that would increase these fees in excess of three to four times the level of the 1978 changes.

We oppose the changes in the scope and amount of these charges. With rail deregulation enacted in 1980, the imposition of even higher waterway fees would further reduce transportation competition.

Should Congress determine that additional revenues are absolutely essential for the operation, maintenance and construction of structures on the inland waterways, we believe that such increased revenues should be balanced and equitable.(H-1983)

ARMY CORPS OF ENGINEERS—LOCKS AND DAMS—The locks and dams on the nation's inland waterways are an integral part of the nation's transportation network.

Many areas of high unemployment need low-cost transportation to spur industrial development and to utilize the use of our abundant supply of coal to offset the use of foreign oil and to get our agricultural products to market.

We view with alarm proposals by the Army Corps of Engineers to close, sell or otherwise divest the federal government of any lock and dam project financed by the United States government.(H-1983)

LOCK AND DAM 26—We support immediate authorization of the engineering design and construction of the second 1,200 foot chamber at Lock and Dam 26 on the Upper Mississippi River.(H-1983)

Resource Development and Federal Multiple Purpose Projects

The critical need for energy in our nation today and the near future necessitates the maximum use of the falling waters in our nation, a replenishing resource that requires no further research and development to harness.

We urge the Congress to appropriate the funds necessary to complete the planning, the environmental and feasibility studies, and to authorize and appropriate funds to construct all feasible multi-purpose projects as rapidly as practical, and also install electric generation in all existing non-hydroelectric projects where feasible. Specific projects would include the following:

Tennessee-Tombigbee Waterway, Alabama-Mississippi
Snettisham (add Crater Lake), Alaska
Hoover Power Plant Arizona-Nevada
Hualapai Site, Arizona
Reclamation and Energy Resources, Lake Mead National Recreation Area Wilderness Designation, Arizona-Nevada
Norfolk Units 3 and 4, Arkansas-Missouri
Ozark, Arkansas
Auburn Dam and Powerplant, California
Boca Powerplant, California
Enlarged Shasta Dam and Powerplant, California
Friant Powerplants, California
Keswick Powerplant, California
Marysville, California
Monticello Powerplant, California
Orland Project, Stoney Gorge-East Park Powerplants, California
Prosser Creek Powerplant, California
Red Bluff Diversion Dam Powerplant, California
Stampede Powerplant, California
Whipple Wash Pumped-Storage Project, California
Whiskeytown Powerplant, California
Canal Drops, Uncompahgre Project, Colorado
CRSP Power Peaking Capacity Generation at Outlet-Blue Mesa, Colorado
Dominguez Project, Colorado
Dunham Point, Colorado
Gore Canyon, Colorado
Taylor Park Powerplant, Colorado
Hartwell Dam-Savannah River (additional) capacity and pumped storage, Georgia-South Carolina
Lazer Creek, Georgia
Lower Auchumpkee, Georgia
Re-regulating Dam below Buford Dam, Georgia
Richard B. Russell (add pumped storage), Georgia-South Carolina
Sprewell Bluff, Georgia
Anderson Ranch, Idaho
Dworshak and Dworshak Re-regulating, Idaho
Garden Valley and Garden Valley Re-regulating, Idaho
Guffey High and Guffey Low, Idaho
Lower Scriver Creek, Idaho
Lucky Peak (addition of generating facilities), Idaho
Lynn Crandall, Idaho
Minidoka, Idaho
Palisades (additional units), Idaho
Teton, Idaho
Chikaskia, Kansas
Booneville, Kentucky
Celena, Kentucky
Dickey-Lincoln, Maine
Pomme DeTerre, Missouri
Canyon Ferry, Montana
Fort Benton, Montana
Ft. Peck (third powerhouse), Montana
Gibson Powerplant Study, Montana
Libby Additional Units and Re-regulating Dam, Montana
Lower Flathead, Montana
Tiber Powerplant Study, Montana
Yellowtail Afterbay Powerplant Study, Montana
Ft. Gibson Units 5 and 6, Oklahoma
Kaw, Oklahoma
Lake Texoma Unit 3, Oklahoma
Bonneville (second powerhouse) Oregon-Washington
Cougar (additions), Oregon
Days Creek, Oregon
John Day, Oregon
McNary (second powerhouse), Oregon-Washington
Strube RRG, Oregon
Raystown (authorization for power), Pennsylvania
Tocks Island, Pennsylvania-New Jersey
Three Islands, Tennessee
Amistad, Texas
Belton, Texas
Neches River Project, Texas
Tennessee Colony, Texas
Central Utah Project, Utah
Dixie Project (authorization for power), Utah
Glen Canyon, Flaming Gorge, Fontanelle and Crystal Utah Lake Unit, Utah
Salem Church, Virginia
Ben Franklin, Washington
Chief Joseph (new units), Washington
Grand Coulee, Washington
Jordan Creek (pumped storage), Washington
Bluestone (generators), West Virginia
Grafton Dam, West Virginia
Rowlesburg, West Virginia
Stonewall Jackson Dam, West Virginia
Summersville Dam (power installation), West Virginia
Sutton Dam (power installation), West Virginia
Willwood Powerplant Study, Wyoming
Low-Head Hydroelectric Evaluation and Inventory, Western States

Furthermore, Congress is urged to appropriate funds to enable preauthorization river basin planning including hydroelectric features, so that construction may be undertaken during subsequent years on a logical sequence of multi-purpose river basin development. Special attention should be given to the:

Lower Colorado Region, Arizona-California-Nevada-Utah
Arkansas River Basin, Quachita River Basin
Red River, Arkansas-Oklahoma-Texas
Northern California Streams
Connecticut River Basin, Connecticut-Massachusetts-Vermont-New Hampshire
Wabash River, Indiana-Illinois
Grand River Basin, Michigan
Mississippi River Basin
Missouri River Basin (Peaking units)
Rio Grande and Tributaries, New Mexico and Colorado
Delaware River Basin, New York-Pennsylvania-Delaware-New Jersey
Mayo and Dan River Basins, North Carolina-Virginia
Ohio River Basin
Willamette River Basin, Oregon
Clarion River, Pennsylvania
Susquehanna River Basin, Pennsylvania-Maryland-New York
Santee River Basin, South Carolina-North Carolina
Savannah River Basin, South Carolina-Ge[illegible]
Yadkin-Pee Dee River Basin, South Carolin[illegible]h Carolina
James River, Virginia
Kanawha River Basin, West Virginia-North Carolina-Virginia
North Platte, Wyoming
Snake River, Wyoming
Upper Yellowstone, Wyoming
Columbia-North Pacific Region
North Atlantic Region
Potomac River Basin
Upper Colorado Region, specifically the Green River, Utah-Colorado-Wyoming-New Mexico

Furthermore, Congress is asked to authorize the U.S. Army Corps of Engineers to construct Bradley Lake, Alaska under agreement with the Alaska Power Authority.

PORT OF OAKLAND

BOARD OF PORT COMMISSIONERS
CITY OF OAKLAND

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WALTER A. ABERNATHY	*Executive Director*

May 5, 1983

Mr. Thomas Skirbunt
U.S. Subcommittee on Water Resources
U.S. Senate
Washington, D.C. 20510

Dear Mr. Skirbunt:

I am transmitting herewith a copy of Port of Oakland's testimony in support of the Oakland Outer Harbor Navigation Improvements as included in S. 947. I would appreciate it very much if the Subcommittee will give it a most favorable consideration.

Sincerely,

Walter A. Abernathy
Executive Director

ks
Enc.

66 Jack London Square • P.O. Box 2064 • Oakland, California 94604 • Phone (415) 444-3188
Cable Address PORTOFOAK, Oakland • Telex 336-334
MEMBER OF THE AMERICAN ASSOCIATION OF PORT AUTHORITIES, INC., THE AIRPORT OPERATORS COUNCIL INTERNATIONAL, INC. and THE INTERNATIONAL ASSOCIATION OF PORTS AND HARBORS

May 5, 1983

Mr. Chairman and Members of the Subcommittee:

I appreciate this opportunity to submit testimony on behalf of the Port of Oakland on favorable consideration for the construction authorization under S. 947 for the project to improve navigation of the Oakland Outer Harbor Channel, Oakland, California.

The Port of Oakland, strategically situated on the mainland side of the San Francisco Bay, is the keystone of a vital national transportation hub on the Pacific Coast. Oakland is the major container exporting port in the West. In 1982, it handled over ten million revenue tons of containerized cargo of which 60 percent is export cargo.

The Oakland Outer Harbor Channel is the main artery of Oakland's maritime industry. This channel provides the navigable waterway to the Port of Oakland Seventh Street Terminal, Outer Harbor Terminal and the Oakland Army Base, encompassing some 21 deep-draft container and general cargo berths and approximately 430 acres of marine terminal area. The terminals of Sea-Land Service and Matson Navigation, both U.S. flag carriers, are served by this channel. The Port of Oakland's investment for its shoreside terminal improvements along this waterway is over $100 million in terms of original costs. The Port is currently planning a new marine terminal in the Outer Harbor area that is estimated at $47 million in today's dollar. This investment does not include the U.S. Army's facilities in the Military Ocean Terminal Bay Area there.

This Outer Harbor Channel was originally improved by the U.S. Army under the original Rivers and Harbors Act of 1874. Subsequent amendment acts of 1927, 1930 and 1945 established the present channel dimensions and depth. The 1945 amendment revised the channel to a project depth of -35 feet based on the vessel designs of that period. However, with the advent of containerization, marine technologies have undergone dramatic evolution. Fourth generation of containership fleets are now in service. These ships draw water depths exceeding -35 feet. Improvements in Oakland's navigation waterway to keep up with modern navigation requirements are long overdue.

Pursuant to a 1972 Congressional authority, the U.S. Army Corps of Engineers has studied extensively the requirements of the Oakland Outer Harbor Channel. Three tiers of Corps of Engineers study reports have been completed and approved by the Secretary of the Army. The project, as recommended by the Army, was authorized for construction under HR 4788, Section 116 (July 13, 1979). The Corps will complete the General Design Memorandum for the channel in September, 1983.

The Final Feasibility Report prepared by the San Francisco District of the U.S. Army Corps of Engineers dated February, 1977 recommended the widening and deepening of the existing 3.5-mile channel and enlarging the entrance channel from 800 feet to 1100 feet; relocating the turning basin to provide for a new 1800 foot basin; and increasing the depth from -35 feet to -42 feet (MLLW = 0). The costs for this work is estimated to be about $25.8 million (1976 prices) of which $22.9 million would be the federal cost. The updated project cost in 1983 is $35,960,000.

The Benefit-Cost Ratio as determined by the Army studies is an astounding 7 to 1. Clearly this waterway, the Oakland Outer Harbor Channel, has pronounced economic impacts on Oakland and the surrounding area. The shipping operations associated with this channel accounts for 32,000 jobs(1) in the San Francisco East Bay area of which 8,000 are direct maritime jobs resulting in an economic impact of over one billion dollars annually. To maintain the economic viability of the Oakland area maritime industries and to ensure that the national interests for trade, commerce and defense are met, it is vital that the construction of the navigational improvements for Oakland Outer Harbor Channel be commenced at the earliest date.

Walter A. Abernathy
Executive Director
Port of Oakland

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(1) Corps of Engineers: Feasibility Report, Feb. 1977.

PORT of VICKSBURG

WARREN COUNTY PORT COMMISSION
P. O. Box 1074 Area Code (601) 636-4422
VICKSBURG, MISSISSIPPI
39180

JAMES B. HEIDEL, PORT DIRECTOR

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BOARD OF SUPERVISORS
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EARL W. LUNDY

May 20, 1983

The Honorable Thad Cochran
United States Senate
321 Russell Senate Office Building
Washington, D.C. 20510

Dear Thad:

SUBJECT: Support of Senate Bill 947 - Vicksburg-Warren County Port Project

Attached are copies of resolutions past by the Warren County Port Commission and the Board of Supervisors of Warren County.

We respectfully request your assistance and support in this matter, since there is a definite need to provide more industrial sites at the Port harbor and the project is needed during this emergency time because of all the flooding that continues to become more critical each day.

Thank you for your assistance in this matter.

Sincerely,

Jimmy

James B. Heidel
Port Director

JBH/ch

enclosure: 2

RESOLUTION

VICKSBURG HARBOR - YAZOO RIVER, MISSISSIPPI

WHEREAS, the Warren County Port Commission through the Corps of Engineers constructed the existing harbor and adjacent industrial area in 1960; and

WHEREAS, the industrial area experienced phenomenal growth, and within ten years after completion, the entire area was committed to development; and

WHEREAS, because of the lack of water frontage for industrial development, the Corps of Engineers and the Mississippi River Commission completed reports recommending the construction of additional harbor improvements at Vicksburg on August 13, 1979; and

WHEREAS, the proposed harbor area is adjacent to Vicksburg-Yazoo area that experiences entensive Mississippi River backwater flooding; and

WHEREAS, over 9,000 acres are subjected to flooding, and numerous residences are affected; and

WHEREAS, Phase I advanced engineering and design studies of a flood control project to protect this area have been delayed pending authorization of the harbor improvements because these two projects are interrelated since a portion of the landfield adjacent to the proposed harbor improvements could serve as a portion of the proposed Vicksburg-Yazoo area levee; and

WHEREAS, the Warren County Board of Supervisors and the Warren County Port Commission does have the means to meet the requirements of the local share; and

WHEREAS, considerable federal funds have been expended or are being expended to improve the Yazoo River Navigation Project; such as nine (9) million dollars for the high level bridge at Belzoni, as a special appropriation from Congress and the dredging project from Yazoo City north to marks for flood control will and they are helpful in reducing the cost for navigation of the River; and

WHEREAS, for the past twenty years, special funds have been accumulated on the local level to provide the matching share for this project; and

WHEREAS, planning of the Yazoo River Navigation Project has shown the important impact on the Vicksburg area and its continued expansion, when the 170 mile channel is opened to Greenwood, Mississippi; and

WHEREAS, the project was authorized for construction in 1968, with $740,000 being spent for preconstruction planning prior to 1981, and in 1981 $450,000 was available, with $600,000 being requested for 1982.

NOW THEREFORE BE IT RESOLVED by the Warren County Port Commission that Congress be and they are hereby respectfully requested to consider the funding of this project for the following reasons:

1. Considerable federal funds have been expended to date, which lessens the cost of construction cost of the project:

2. The construction of this project will benefit the low income families that live near the area that are flooded out of their homes each year, when the 9,000 acres flood:

3. The project would provide short term and long term jobs for the unemployed and unemployed low and moderate income people:

4. In 1983, $1,916,000 has already been committed by Congress to complete the study, therefore, no further funds are needed to complete the study:

5. The unimproved state of the Yazoo River has handled over 500,000 tons per year of water borne traffic over the past five years:

6. Local funds are on hand to match the federal funds when appropriated:

7. Since more than a decade has passed since this important project was authorized and the fact that there is not any land available at the present time to locate new industry that has been visiting Vicksburg, which will create new jobs:

8. There is a bill before the Senate now that would approve the project.

ORDERED on this the 16th day of May, 1983, all members present voting, "AYA".

President

RESOLUTION

VICKSBURG HARBOR - YAZOO RIVER, MISSISSIPPI

WHEREAS, the Warren County Port Commission through the Corps of Engineers constructed the existing harbor and adjacent industrial area in 1960; and

WHEREAS, the industrial area experienced phenomenal growth, and within ten years after completion, the entire area was committed to development; and

WHEREAS, because of the lack of water frontage for industrial development, the Corps of Engineers and the Mississippi River Commission completed reports recommending the construction of additional harbor improvements at Vicksburg on August 13, 1979; and

WHEREAS, the proposed harbor area is adjacent to Vicksburg-Yazoo area that experiences entensive Mississippi River backwater flooding; and

WHEREAS, over 9,000 acres are subjected to flooding, and numerous residences are affected; and

WHEREAS, Phase I advanced engineering and design studies of a flood control project to protect this area have been delayed pending authorization of the harbor improvements because these two projects are interrelated since a portion of the landfield adjacent to the proposed harbor improvements could serve as a portion of the proposed Vicksburg-Yazoo area levee; and

WHEREAS, the Warren County Board of Supervisors and the Warren County Port Commission does have the means to meet the requirements of the local share; and

WHEREAS, considerable federal funds have been expended or are being expended to improve the Yazoo River Navigation Project, such as nine (9) million dollars for the high level bridge at Belzoni, as a special appropriation from Congress and the dredging project from Yazoo City north to marks for flood control will and they are helpful in reducing the cost for navigation of the River; and

WHEREAS, for the past twenty years, special funds have been accumulated on the local level to provide the matching share for this project; and

WHEREAS, planning of the Yazoo River Navigation Project has shown the important impact on the Vicksburg area and its continued expansion, when the 170 mile channel is opened to Greenwood, Mississippi; and

WHEREAS, the project was authorized for construction in 1968, with $740,000 being spent for preconstruction planning prior to 1981, and in 1981, $450,000 was available, with $600,000 being requested for 1982.

NOW THEREFORE BE IT RESOLVED by the Warren County Board of Supervisors that Congress be and they are hereby respectfully requested to consider the funding of this project for the following reasons:

1. Considerable federal funds have been expended to date, which lessens the cost of construction cost of the project:

2. The construction of this project will benefit the low income families that live near the area that are flooded out of their homes each year, when the 9,000 acres flood:

3. The project would provide short term and long term jobs for the unemployed and unemployed low and moderate income people:

4. In 1983, $1,916,000 has already been committed by Congress to complete the study, therefore, no further funds are needed to complete the study:

5. The unimproved state of the Yazoo River has handled over 500,000 tons per year of water borne traffic over the past five years:

6. Local funds are on hand to match the federal funds when appropriated:

7. Since more than a decade has passed since this important project was authorized and the fact that there is not any land available at the present time to locate new industry that has been visiting Vicksburg, which will create new jobs:

8. There is a bill before the Senate now that would approve the project:

ORDERED on this the 19th day of May, 1983, all members present voting, "AYE".

James R. Andrews
James R. Andrews, President
District 5

Thomas Akers
Thomas Akers, District 1

John Ferguson
John Ferguson, District 2

Z. B. Fry
Z. B. Fry, District 3

Carl P. Kelly
Carl P. Kelly, District 4

II

98TH CONGRESS
1ST SESSION

S. 947

To authorize the United States Army Corps of Engineers to construct various projects for improvements to rivers and harbors of the United States, and for other purposes.

IN THE SENATE OF THE UNITED STATES

MARCH 24 (legislative day, MARCH 21), 1983

Mr. ABDNOR introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works

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A BILL

To authorize the United States Army Corps of Engineers to construct various projects for improvements to rivers and harbors of the United States, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may be cited as the "Water Resources Development Act of 1983".

TITLE I

Notwithstanding any other provision of law, the Secretary of the Army, acting through the Chief of Engineers (hereinafter in this Act referred to as the "Secretary"), shall obligate no sums in excess of the sums specified in this title for the combined purpose of the "Construction General" account and the "Flood Control, Mississippi River and Tributaries" account:

(1) For the fiscal year ending September 30, 1984, the sum of $1.5 billion.

(2) For the fiscal year ending September 30, 1985, the sum of $1.6 billion.

(3) For the fiscal year ending September 30, 1986, the sum of $1.6 billion.

(4) For the fiscal year ending September 30, 1987, the sum of $1.6 billion.

(5) For the fiscal year ending September 30, 1988, the sum of $1.6 billion.

TITLE II

The following works of improvement of rivers and harbors and other waterways for navigation, flood control, and other purposes are hereby adopted and authorized to be prosecuted by the Secretary in accordance with the plans and subject to the conditions recommended in the respective reports hereinafter designated:

(a) DEEP-DRAFT NAVIGATION.—

(1) Mobile Harbor, Alabama: Report of the Chief of Engineers dated November 18, 1981, at a Federal cost of $408,000,000;

(2) Kodiak Harbor, Alaska: Report of the Chief of Engineers dated September 7, 1976, at a Federal cost of $13,400,000;

(3) San Francisco Harbor, California, Fisherman's Wharf Area: Reports of the Chief of Engineers dated February 3, 1978, and June 7, 1979, at a Federal cost of $13,500,000;

(4) Oakland Outer Harbor, California: Report of the Chief of Engineers dated January 7, 1980, at a Federal cost of $36,040,000;

(5) Richmond Harbor, California: Report of the Chief of Engineers dated August 8, 1982, at a Federal cost of $48,400,000;

(6) Sacramento River, Deepwater Ship Channel, California: Report of the Chief of Engineers dated November 20, 1981, at a Federal cost of $77,000,000;

(7) New Haven Harbor, Connecticut: Report of the Chief of Engineers dated July 26, 1982, at a Federal cost of $23,000,000;

(8) Jacksonville Harbor, Mill Cove Florida: Report of the Chief of Engineers dated February 12, 1982, at a Federal cost of $5,700,000;

(9) Manatee Harbor, Florida: Report of the Chief of Engineers dated May 12, 1980, at a Federal cost of $10,600,000;

(10) Tampa Harbor, East Bay Channel, Florida: Report of the Chief of Engineers dated January 25, 1979, to assume maintenance;

(11) Savannah Harbor, Widening, Georgia: Report of the Chief of Engineers dated December 19, 1978, at a Federal cost of $11,700,000;

(12) Grand Haven Harbor, Michigan: Report of the Chief of Engineers dated October 9, 1979, at a Federal cost of $12,900,000;

(13) Monroe Harbor, Michigan: Report of the Chief of Engineers dated November 25, 1981, at a Federal cost of $68,700,000;

(14) Wilmington Harbor, Northeast Cape Fear River, North Carolina: Report of the Chief of Engineers dated September 16, 1980, at a Federal cost of $7,740,000;

(15) Gowanus Creek, Channel, New York: Report of the Chief of Engineers dated September 14, 1982, at a Federal cost of $2,000,000;

(16) Kill Van Kull and Newark Bay Channels, New York and New Jersey: Report of the Chief of Engineers dated December 14, 1981, at a Federal cost of $178,000,000;

(17) San Juan Harbor, Puerto Rico, Phase I GDM: Report of the Chief of Engineers dated December 23, 1982, at a Federal cost of $72,800,000;

(18) Charleston Harbor, South Carolina: Report of the Chief of Engineers dated August 27, 1981, at a Federal cost of $76,100,000;

(19) Brazos Island Harbor, Texas, Brownsville Channel: Report of the Chief of Engineers dated December 20, 1979, at a Federal cost of $26,700,000;

(20) Norfolk Harbor and Channels, Virginia: Report of the Chief of Engineers dated November 20, 1981, at a Federal cost of $446,000,000;

(21) Crown Bay Channel-Saint Thomas Harbor, Virgin Islands: Report of the Chief of Engineers dated April 9, 1982, at a Federal cost of $3,500,000; and

(22) Blair and Sitcum Waterways, Tacoma Harbor, Washington: Report of the Chief of Engineers dated February 8, 1977, at a Federal cost of $30,000,000.

(b) INLAND AND SHALLOW-DRAFT NAVIGATION.—

(1) Helena Harbor, Phillips County, Arkansas: Report of the Chief of Engineers dated October 17, 1980, at a Federal cost of $42,000,000;

(2) White River Navigation to Batesville, Arkansas: Report of the Chief of Engineers dated December 23, 1981, at a Federal cost of $20,500,000;

(3) Lake Pontchartrain, North Shore, Louisiana: Report of the Chief of Engineers dated February 14, 1979, at a Federal cost of $850,000;

(4) Greenville Harbor, Mississippi: Reports of the Chief of Engineers dated November 15, 1977, and February 22, 1982, at a Federal cost of $27,700,000;

(5) Vicksburg Harbor, Mississippi: Report of the Chief of Engineers dated August 13, 1979, at a Federal cost of $54,700,000;

(6) Atlantic Intracoastal Waterway Bridges, North Carolina: Report of the Chief of Engineers dated October 1, 1975, at a Federal cost of $8,000,000;

(7) Olcott Harbor, New York: Report of the Chief of Engineers dated June 11, 1980, at a Federal cost of $5,320,000;

(8) Bonneville Lock and Dam, Oregon and Washington-Columbia River and Tributaries Interim Report: Reports of the Chief of Engineers dated March 14, 1980, and February 10, 1981, at a Federal cost of $177,000,000;

(9) Memphis Harbor, Memphis, Tennessee: Report of the Chief of Engineers dated February 25, 1981, at a Federal cost of $43,000,000; and

(10) Gallipolis Locks and Dam Replacement, Ohio River, Ohio and West Virginia: Report of the Chief of Engineers dated April 8, 1982, at a Federal cost of $313,000,000.

(c) FLOOD CONTROL.—

(1) Village Creek, Jefferson County, Alabama: Report of the Chief of Engineers dated December 23, 1982, at a Federal cost of $20,700,000;

(2) Eight Mile Creek, Paragould, Arkansas: Report of the Chief of Engineers dated August 10, 1979, at a Federal cost of $14,500,000;

(3) Fourche Bayou Basin, Little Rock, Arkansas: Report of the Chief of Engineers dated September 4, 1981, at a Federal cost of $19,700,000;

(4) Little Colorado River at Holbrook, Arizona: Report of the Chief of Engineers dated December 23, 1981, at a Federal cost of $7,730,000;

(5) Cache Creek Basin, California: Report of the Chief of Engineers dated April 27, 1981, at a Federal cost of $21,100,000;

(6) Redbank and Fancher Creeks, California: Report of the Chief of Engineers dated May 7, 1981, at a Federal cost of $57,200,000;

(7) Santa Ana River Mainstem, Including Santiago Creek, California: Report of the Chief of Engineers dated January 15, 1982, at a Federal cost of $1,180,000,000;

(8) Fountain Creek, Pueblo, Colorado, Phase I GDM: Report of the Chief of Engineers dated December 23, 1981, at a Federal cost of $6,600,000;

(9) Metropolitan Denver and South Platte River and Tributaries, Colorado, Wyoming, and Nebraska: Report of the Chief of Engineers dated December 23, 1981, at a Federal cost of $9,080,000;

(10) Oates Creek, Georgia: Report of the Chief of Engineers dated December 23, 1981, at a Federal cost of $8,360,000;

(11) Agana River, Guam: Report of the Chief of Engineers dated March 14, 1977, at a Federal cost of $5,820,000;

(12) Big Wood River and Tributaries, Idaho, Interim Report—Little Wood River, Vicinity of Gooding and Shoshone, Idaho: Report of the Chief of Engineers dated November 2, 1977, at a Federal cost of $3,750,000;

(13) Rock River at Rockford and Vicinity, Illinois, Loves Park Interim: Report of the Chief of Engineers dated September 15, 1980, at a Federal cost of $22,800,000;

(14) Halstead, Kansas: Report of the Chief of Engineers dated May 8, 1979, at a Federal cost of $6,130,000;

(15) Atchafalaya Basin Floodway system, Louisiana: Report of the Chief of Engineers dated February 28, 1983, at a Federal cost of $195,000,000;

(16) Bushley Bayou, Louisiana, Phase I GDM: Reports of the Chief of Engineers dated April 30, 1980, and August 12, 1982, at a Federal cost of $42,800,000;

(17) Louisiana State Penitentiary Levee, Mississippi River: Report of the Chief of Engineers dated December 10, 1982, at a Federal cost of $20,500,000;

(18) Quincy Coastal Streams, Massachusetts, Town Brook Interim: Report of the Chief of Engineers dated December 14, 1981, at a Federal cost of $25,100,000;

(19) Redwood River at Marshall, Minnesota: Report of the Chief of Engineers dated November 16, 1981, at a Federal cost of $3,130,000;

(20) Root River Basin, Minnesota: Report of the Chief of Engineers dated May 13, 1977, at a Federal cost of $8,150,000;

(21) South Fork Zumbro River Watershed at Rochester, Minnesota: Report of the Chief of Engineers dated February 23, 1979, at a Federal cost of $77,800,000;

(22) Horn Lake Creek and Tributaries, Including Cow Pen Creek, Tennessee and Mississippi: Report of the Chief of Engineers dated January 4, 1983, at a Federal cost of $2,450,000;

(23) Robinson's Branch of the Rahway River at Clark, Scotch Plains, and Rahway, New Jersey: Report of the Chief of Engineers dated October 10, 1975, at a Federal cost of $13,500,000;

(24) Rahway River and Van Winkles Brook at Springfield, New Jersey: Report of the Chief of Engineers dated October 24, 1975, at a Federal cost of $12,300,000;

(25) Green Brook Subbasin, Raritan River Basin, New Jersey: Report of the Chief of Engineers dated September 4, 1981, at a Federal cost of $72,900,000;

(26) Middle Rio Grande Flood Protection, Bernalillo to Belen, New Mexico: Report of the Chief of En-

gineers dated June 23, 1981, at a Federal cost of $39,200,000;

(27) Puerco River and Tributaries, Gallup, New Mexico: Report of the Chief of Engineers dated September 4, 1981, at a Federal cost of $3,220,000;

(28) Cazenovia Creek Watershed New York: Report of the Chief of Engineers dated September 8, 1977, at a Federal cost of $1,910,000;

(29) Mamaroneck and Sheldrake Rivers Basin and Byram River Basin, New York and Connecticut: Report of the Chief of Engineers dated April 4, 1979, at a Federal cost of $44,100,000;

(30) Hocking River at Logan and Nelsonville, Ohio: Report of the Chief of Engineers dated June 23, 1978, at a Federal cost of $6,180,000 for Logan and $6,460,000 for Nelsonville;

(31) Miami River, Little Miami River, Interim Report Number Two, West Carrollton, Holes Creek, Ohio: Report of the Chief of Engineers dated December 23, 1981, at a Federal cost of $5,950,000;

(32) Muskingum River Basin, Ohio: Report of the Chief of Engineers dated February 3, 1978, at a Federal cost of $3,500,000 for Mansfield and $6,420,000 for Killbuck;

(33) Scioto River at North Chillicothe, Ohio: Report of the Chief of Engineers dated September 4, 1981, at a Federal cost of $9,070,000;

(34) Mingo Creek, Tulsa, Oklahoma: Report of the Chief of Engineers dated November 16, 1981, at a Federal cost of $87,800,000;

(35) Parker Lake, Muddy Boggy Creek, Oklahoma: Report of the Chief of Engineers dated May 30, 1980, at a Federal cost of $4,980,000;

(36) Harrisburg, Pennsylvania, Phase I GDM: Report of the Chief of Engineers dated May 16, 1979, at a Federal cost of $102,000,000;

(37) Lock Haven, Pennsylvania, Phase I GDM: Report of the Chief of Engineers dated December 14, 1981, at a Federal cost of $65,500,000;

(38) Saw Mill Run, Pittsburgh, Pennsylvania: Report of the Chief of Engineers dated January 30, 1978, at a Federal cost of $7,020,000;

(39) Big River Reservoir, Rhode Island: Report of the Chief of Engineers dated March 9, 1983, at a Federal cost of $40,900,000;

(40) Nonconnah Creek, Tennessee and Mississippi: Report of the Chief of Engineers dated December 23, 1982, at a Federal cost of $19,200,000;

(41) Buffalo Bayou and Tributaries, Texas: Report of the Chief of Engineers dated June 13, 1978, at a Federal cost of $75,000,000;

(42) Boggy Creek, Austin, Texas: Report of the Chief of Engineers dated January 19, 1981, at a Federal cost of $13,800,000;

(43) Lake Wichita, Holliday Creek, Texas: Report of the Chief of Engineers dated July 9, 1979, at a Federal cost of $14,900,000;

(44) James River Basin, Richmond, Virginia, Phase I GDM: Report of the Chief of Engineers dated November 16, 1981, at a Federal cost of $79,600,000;

(45) Chehalis River at South Aberdeen and Cosmopolis, Washington: Report of the Chief of Engineers dated February 8, 1977, at a Federal cost of $19,300,000; and

(46) Yakima Union Gap, Washington: Report of the Chief of Engineers dated May 7, 1980, at a Federal cost of $8,640,000.

(d) HYDROPOWER DEVELOPMENT.—

(1) South Central Railbelt Area, Alaska, Hydroelectric Power, Valdez and Copper River Basin: Report of the Chief of Engineers dated October 29, 1982, at a Federal cost of $40,500,000;

(2) Murray Lock and Dam, Hydropower, Arkansas: Report of the Chief of Engineers dated December 23, 1981, at a Federal cost of $92,900,000;

(3) Metropolitan Atlanta Area Water Resources Management Study, Georgia: Report of the Chief of Engineers dated June 1, 1982, at a Federal cost of $24,500,000;

(4) Lucky Peak Dam and Lake, Idaho, Modification Study: Report of the Chief of Engineers dated March 17, 1980, at a Federal cost of $98,700,000;

(5) Libby Reregulation Dam Power Units, Kootenai River, Montana, Design Memorandum One, Phase I GDM: Report of the Chief of Engineers dated July 18, 1977, at a Federal cost of $74,000,000;

(6) W. D. Mayo Lock and Dam 14, Hydropower, Oklahoma: Report of the Chief of Engineers dated December 23, 1981, at a Federal cost of $112,000,000; and

(7) McNary Lock and Dam Second Powerhouse, Columbia River, Oregon and Washington, Phase I GDM: Report of the Chief of Engineers dated June 24, 1981, at a Federal cost of $600,000,000;

(e) SHORELINE PROTECTION.—

(1) Charlotte County, Florida: Report of the Chief of Engineers dated April 2, 1982, at a Federal cost of $1,440,000;

(2) Indian River County, Florida: Report of the Chief of Engineers dated December 21, 1981, at a Federal cost of $2,300,000;

(3) Panama City Beaches, Florida: Report of the Chief of Engineers dated July 8, 1977, at a Federal cost of $26,200,000;

(4) Saint Johns County, Florida: Report of the Chief of Engineers dated February 26, 1980, at a Federal cost of $7,660,000;

(5) Jekyll Island, Georgia: Report of the Chief of Engineers dated March 3, 1976, at a Federal cost of $5,870,000;

(6) Atlantic Coast of Maryland and Assateague Island, Virginia: Report of the Chief of Engineers dated September 29, 1981, at a Federal cost of $21,000,000;

(7) Atlantic Coast of New York City from Rockaway Inlet to Norton Point, New York: Report of the Chief of Engineers dated August 18, 1976, at a Federal cost of $2,970,000;

(8) Presque Isle Peninsula, Erie, Pennsylvania: Report of the Chief of Engineers dated October 2, 1981, at a Federal cost of $17,200,000; and

(9) Folly Beach, South Carolina: Report of the Chief of Engineers dated March 17, 1981, at a Federal cost of $1,110,000.

(f) MITIGATION.—

(1) Fish and Wildlife Program for the Sacramento River Bank Protection Project, California, First Phase: Report of the Chief of Engineers dated September 1, 1981, at a Federal cost of $2,030,000;

(2) Richard B. Russell Dam and Lake, Savannah River, Georgia and South Carolina, Fish and Wildlife Mitigation Report: Report of the Chief of Engineers dated May 11, 1982, at a Federal cost of $18,700,000;

(3) West Kentucky Tributaries Projects, Fish and Wildlife Mitigation Plan, Obion Creek, Kentucky: Report of the Chief of Engineers dated September 16, 1980, at a Federal cost of $3,980,000;

(4) Cape May Inlet to Lower Township, New Jersey, Phase I GDM: Report of the Chief of Engineers dated December 23, 1981, at a Federal cost of $15,600,000; and

(5) Cooper Lake and Channels Project, Texas Report on Fish and Wildlife Mitigation: Report of the

Chief of Engineers dated May 21, 1982, at a Federal cost of $7,570,000.

(g) DEMONSTRATION.—

(1) Cabin Creek, West Virginia, Demonstration Reclamation Project: Report of the Chief of Engineers dated March 1, 1979, at a Federal cost of $32,800,000;

(2) Lava Flow Control, Island of Hawaii, Hawaii: Report of the Chief of Engineers dated July 21, 1981, at a Federal cost of $3,950,000.

OMNIBUS WATER RESOURCES LEGISLATION

TUESDAY, MAY 17, 1983

U.S. Senate,
Committee on Environment and Public Works,
Subcommittee on Water Resources,
Washington, D.C.

The subcommittee met at 3:08 p.m., in room SD-406, Dirksen Senate Office Building, Hon. James Abdnor (chairman of the subcommittee) presiding.

Present: Senators Abdnor and Stafford.

OPENING STATEMENT OF JAMES ABDNOR, U.S. SENATOR FROM THE STATE OF SOUTH DAKOTA

Senator **Abdnor**. The Subcommittee on Water Resources will come to order.

I should commence by apologizing for the problems we have encountered on the floor. We are confronted with nine back-to-back votes, with just minutes in between, which means all afternoon we will be returning to the floor with some regularity.

We are going to have some problems. We tried to move this meeting to the Capitol but could not find a vacant room over there. So what we thought we would try to do is leave a little bit of flexibility and options for you.

Those who absolutely cannot return, we will give you an opportunity to leave your statement for the record. Those who want to stick around until tomorrow, we think we could work this in tomorrow morning.

That is not giving you a great deal of choice. If any of you would like to testify tomorrow, I would ask that you contact the staff today and we will go ahead with that. I am sure we can work it in in the morning, because our schedule is going to be lighter than we had anticipated. We expected a very long, lengthy session on the subject of cost sharing. We will probably put the time into this.

I know it is not quite what we would like to do, but it is the only option we have.

We are delighted to have the chairman of the full committee with us today. We know how strongly he feels about these issues.

OPENING STATEMENT OF HON. ROBERT T. STAFFORD, U.S. SENATOR FROM THE STATE OF VERMONT

Senator **Stafford**. I came by, Mr. Chairman, to reinforce what you said, the fact that this afternoon the Senate is going through nine successive rollcall votes, one right after the other, with a time for each vote reduced from 15 to 10 minutes. They started at 2.

That has put us in the embarrassing position that has been described for you by Senator Abdnor, the subcommittee chairman. A number of the witnesses who were to appear this afternoon included Members of the Senate and the House. They can be accommodated tomorrow.

I would again second the invitation of Senator Abdnor for those of you who wish to testify personally, to be here tomorrow morning at 10; or place your statements in the record this afternoon. As the chairman has indicated, they will appear in the record. They will be examined by the committee staff and the members. So we have those two options open to you.

To indicate that I am going to have to follow that same option myself, Mr. Chairman, I ask unanimous consent that an opening statement that I have appear in the record. It principally welcomes Michael Smith, town manager of Hardwick, Vt., to this meeting. If I had time to be able to deliver it, I would.

Also, I have several letters from the State of Vermont directed to me as chairman of the full committee and signed by John R. Ponsetto, commissioner for the Agency of Environmental Conservation in Vermont, Department of Water Resources and Environmental Engineering.

I would ask unanimous consent that at an appropriate place in the record that be part of the record also.

Senator ABDNOR. Without objection, the statement and the letters will be made a part of the record.

[The statement and letters referred to follow:]

Statement

Senator Robert T. Stafford

Subcommittee on Water Resources

2 p.m., May 17, 1983

Room SD-406, Dirksen Senate Office Building

Mr. Chairman, I am pleased that you have invited as one of this afternoon's witnesses Michael K. Smith, the Town Manager of Hardwick, Vermont. Mr. Smith has come to Washington to testify on my bill, S. 635, and to relate to this Subcommittee the severe problems confronting the citizens of Hardwick each winter when ice jams occur. These jams produce severe flooding in the town.

My bill would authorize the Army Corps of Engineers to study and alleviate the problem, not only in Hardwick, but throughout the nation.

I endorse Mr. Smith's views. I hope the Subcommittee will have a better understanding of this problem once we have the opportunity to hear Smith's persuasive arguments.

Thank you.

State of Vermont

AGENCY OF ENVIRONMENTAL CONSERVATION

Department of Fish and Game
Department of Forests, Parks, and Recreation
Department of Water Resources & Environmental Engineering
Natural Resources Conservation Council

Montpelier, Vermont 05602
Department of Water Resources
and
Environmental Engineering

May 13, 1983

Senator Robert T. Stafford
Chairman
Senate Environment & Public Works Comm.
5215 New Senate Office Building
Washington, D.C. 20510

Re: S-635

Dear Senator Stafford:

The State of Vermont wishes to go on record formally supporting S-635 and to provide information to the Senate Committee on Environment and Public Works regarding the status of Waterbury Dam and the urgent need for the authority, funding, and direction for the Corps of Engineers to undertake its stabilization and rehabilitation.

Though the state and the Corps have reached similar conclusions on the repair work which should be undertaken at Waterbudy Dam, we differ on the danger involved in operating the dam in its present condition. Because the Corps has concluded that the dam is safe enough to allow filling the reservoir, they will not fund the repairs. We believe that there is enough uncertainty about the safety of the dam so that operating the reservoir at its normal level or at the higher flood control elevations would unduly threaten the lives and safety of people and property downstream. We also feel that the major repairs required to the federally constructed facility should be federally funded. The State of Vermont now finds itself with substantial responsibility for protection of downstream populations, limited resources, and conflicting recommendations in state, federal, and private consultant analyses. We look to the Congress for assistance through the passage of the above cited legislation.

Waterbury Dam is a local protection flood control project. It is described in House Document #875, 71st Congress, dated

February 26, 1931. It was constructed by the Civilian Conservation Corps, with design and construction supervision by the U.S. Army Corps of Engineers, between 1935 and 1938 and turned over to the State of Vermont for operation and maintenance upon its completion. From 1956 to 1958, the Corps constructed major modifications to the dam for flood control purposes.

The structure is an 187 feet high, earthfill dam, 2,100 feet in length (including spillway) with a large dumped rock toe and stone facing. It operates as a multi-purpose impoundment. Under normal operation it impounds 90 feet of water, creating an 890 acre reservoir with a volume of 37,000 acre feet of water. A 5.5 megawatt hydro electric generating facility is operated by the Green Mountain Power Corporation at the outflow from the dam. Above the normal recreation pool is additional storage capacity of 45,000 acre feet reserved for flood control purposes. The State of Vermont maintains and operates one major state park and a day use facility on the recreation pond. In addition, the body of water is heavily used for other recreational activities including fishing, water skiing, swimming, boating, etc.

Since December of 1980 the reservoir has been drained in response to evidence that internal erosion or "piping" could lead to failure of the structure. Investigations into the cause and seriousness of this problem have been conducted by the State of Vermont, private consultants, and by the U.S. Army Corps of Engineers. Recognizing potential for the loss of life and property, which could result from a breach of the structure, the State of Vermont has felt it prudent to operate the dam at one-third its normal pool elevation (about 10% of normal storage) at which point, if breach did occur, loss of life or substantial property damage would not be likely.

In 1942, four years after the dam was placed in operation, seepage broke out at the toe of the dam. This was reported to the Corps of Engineers and investigated by them at that time. Subsequent observations by the Corps and state personnel indicated an apparent increase flows from the springs at the toe of the dam in 1957. This was followed by buckling and movement of the stone face of the dam in 1967. In 1976 additional movement of the stone facing and deposits of silt at the springs were observed. In 1980 there was a rapid formation of sink holes in the terrace at the toe of the dam, subsidence on the stone face, and movement of silt from under the dam with the seepage. At this point a consultant was engaged to evaluate the situation. The consultant recommended dewatering of the reservoir until the cause of the stress could be identified and appropriate corrective action undertaken.

Under normal circumstances dewatering the reservoir would afford adequate protection to the life and property below the structure. In this particular circumstance, however, this is not true. The only outlet through the structure is constrained by modifications which were made to the dam in the past by the Corps of Engineers to facilitate use of the dam for hydro electric generation. Because the volume of spring runoff, and excessive storm flows at other times, substantially exceeds the capacity of the restricted outlet, the reservoir can rapidly fill even with the turbine (which is the only outlet) running at full capacity. For example, during the period of February 17 - 25, 1981 with the turbine running, the surface level of the reservoir rose 50 feet and the amount of water impounded increased from 2,100 acre feet to 21,000 acre feet. The flows in the seep increased from a rate of 30,000 gallons per day to 105,000 gallons per day and became turbid during this period. A similar rise occurred this spring. Should a breach occur at this stage of the reservoir, substantial loss of life and property would occur downstream.

Since December of 1980, when the latest and most serious problems were identified, the Corps of Engineers, through its New York District, has undertaken extensive studies of the dam. The data gained from their studies has been developed and a report written which is currently in draft form. The position of the Corps, based on this report, is that the dam can be operated in its current condition. The decision, however, rests with the State of Vermont.

The Department of Water Resources has limited capability to evaluate the unique circumstances surrounding this problem. To assist us we engaged a nationally recognized consultant to review the initial consultant's work, the Corps study and any additional data available, and then to recommend to the state how it should proceed. We have reviewed the results of the Corps of Engineers evaluation and of the consultant's evaluation. We are of the opinion that it would not be prudent and in the best interests of the public safety and welfare of the people of the State of Vermont to place the reservoir back in the normal operating mode without certain modifications being made.

The data obtained by the Corps of Engineers and by the consultant shows that a seep occurs through the foundation upon which the dam was constructed. This seep concentrates in one general area and emerges at the downstream toe of the dam below the area where the subsidence has occurred. It is also evident that the nature of the material which makes up the foundation on which the dam is constructed is susceptible to "piping". It is further evident that the constraints on the low level outlet of the dam preclude its dewatering in less than 30 days even under low inflow conditions. Therefore, we feel it unwise to operate with this dam which is sensitive to piping and where we are unable to dewater at a rate fast enough to avoid failure.

It is our opinion that three actions should be undertaken to insure that the dam is safe and capable of being operated in its historic fashion. First, the low level outlet of the dam should be increased in capacity to allow for the dewatering of the reservoir in a reasonable period of time. Second, an expanded monitoring system should be installed in the dam and its foundation which would allow the state to identify changes in the stability of the structure soon enough to permit dewatering of the dam should such be necessary. Third, a "filter" should be designed for the portion of the downstream face of the dam susceptible to "piping". The filter should be installed if the monitoring shows it is needed. It is anticipated that the three phases of the project can be undertaken at a cost of approximately 3 million dollars. The improved low level outlet is the primary difference between our recommendations for repair and the Corps findings. We address these three elements of the proposed project further in the following paragraphs.

The original design of the dam included a low level draw down tunnel with an outlet capacity of 7,300 cubic feet per second (cfs). This structure would have been adequate for proper operation and rapid draw down of the reservoir. This design feature, however, was modified in 1935 to provide for two 54 inch penstocks with valves in anticipation of hydro electric generation at a future date. This modification of the outlet reduced the draw down capability to approximately 1,500 cfs, or 20 percent of the original design. Subsequently, in 1953, this outlet structure was further modified by installation of the hydro electric generation station. This installation further reduced the draw down capability to approximately 750 cfs, or 10% of the original design. The two valves which would allow greater capacity and draw down were removed from the conduits.

To increase the draw down capability we recommend that the two valves similar to those removed in 1953 be re-installed together with the necessary conduits to carry the flows to the Waterbury River in a manner that would not affect the hydro electric facility.

We recommend the installation of a series of additional piezometers and observation wells in that portion of the dam which previous investigations have shown to be the area of concern. These observation wells and piezometers should be installed and instrumented to allow early identification by the state of any changes which are occurring within the dam and, more importantly, the foundation materials.

The third phase of the project if required would include the installation of a "filter" in the toe of the dam. The initial design documents regarding this dam identified the susceptibility of the foundation materials to piping and recommended a design which included a cut off to prevent flows through this foundation material. Some time between that point (1930) and the time construction began in 1935, a decision by the Corps of Engineers was made to not require positive (complete) cut off in the foundation. More importantly, no filter was installed between the dumped rock toe of the dam, the foundation and the embankments to prevent piping. Installation of such a filter is standard procedure now and would have eliminated our present concerns over piping in this dam. The filter we are proposing in the third phase of our corrective action would correct this deficiency.

It is important to note that both the high capacity.low level outlet and the filter we propose, are standard safety requirements of dam construction today.

In summary, we support this bill and encourage your prompt action to provide for the rehabilitation by the Corps of Engineers of this dam to meet, to the extent possible, currently accepted standards of design and to undertake this work at the earliest possible date due to the peculiar unsafe circumstances which result from the involuntary filling caused by constraints on the outlet structure.

As a part of the project to restore this 45 year old dam, to serve the purposes intended for another extended period of time, the project should include restoration of the concrete work which has been deteriorating from long years of hard Vermont weather.

With the forementioned corrective action, we feel the dam can be placed into its normal mode of operation and serve the community well for another half a century.

Obviously, our most immediate concern with S-635 is the portion dealing with the Waterbury Dam. However, we find that the programs contemplated by all portions of the bill would be of benefit to the state in the management of our water resources. Almost annually we have problems with river ice and need a systematic way to effect controls. Streambank erosion is important not only from its impact on property, but also its secondary effect on flooding and sedimentation.

We thank you for this opportunity to address the Committee and look forward to your continued support.

Sincerely,

John R. Ponsetto

John R. Ponsetto
Commissioner

JRP:arm

State of Vermont

AGENCY OF ENVIRONMENTAL CONSERVATION

Montpelier, Vermont 05602
Department of Water Resources
and
Environmental Engineering

Department of Fish and Game
Department of Forests, Parks, and Recreation
Department of Water Resources & Environmental Engineering
Natural Resources Conservation Council

May 25, 1983 -

Re: Waterbury Dam

Dear

During the past two years, I have communicated with you on several occasions to keep you aware of the progress the Department of Water Resources and Environmental Engineering is making toward the resolution of the problems with the Waterbury Dam. I again write for that purpose.

In December of 1980, the Department directed that the reservoir be drained in reaction to mounting evidence that the dam or its foundation was under stress. In a short period of time prior to that direction, flows from the seep at the toe of the dam increased; the seep flows appear to be carrying materials which were made up either of the core of the dam or the foundation upon which the dam was built, and subsidence occurred on the rock face of the dam and the plateau adjacent to the toe of the dam. Because of these events, we engaged a consultant experienced in hydrogeology and earth dams to assist us with the evaluation of the situation. His report supported the decision to drain the reservoir as he concluded that "piping or internal erosion of the silt and clay size particles was occurring in the terrace foundation and/or impervious embankment core."

In the following year and a half, the U.S. Army Corps of Engineers undertook extensive testing and evaluation of the structure. In the fall of 1982, the Corps submitted to us a draft copy of their study together with their recommendations regarding the use of the dam. In essence, they concluded in their their draft that the dam could be placed back into normal operations but that intensive monitoring of its situation should continue.

A review of the draft report by the Department raised a number of questions regarding the Corps' interpretation of some elements of the field study. Direct inquiries were made to the Corps on these matters. The responses did not fully abate our concerns.

Due to the limited experience of the staff of the Department as relates to the complexity of the evaluations necessary to determine the stability and safety of the dam and due to the sensitivity of the downstream basin to the loss of life and property, should a breach occur, the Department felt it would be prudent to engage a qualified neutral party to resolve the outstanding concerns. In the spring of this year, we engaged the services of TAMS (Tibbetts-Abbett-McCarthy-Stratton) a nationally known firm with extensive world-wide experience in earth dam evaluations. We asked that firm to review all work which had been done to date on the evaluation of the dam to determine if all necessary data was available for assessment of the conditions. We further requested that they make an assessment of the dam and recommendations, including conceptual designs, cost estimates, and schedules for remedial actions if such are warranted.

During this past week, TAMS' "Safety Evaluation of Waterbury Dam" was received and the following are some of the pertinent points from that assessment.

- The post-1980 investigations are considered to be adequate for proper assessment of the present safety of the dam.
- There is insufficient evidence to conclude that progressive erosion due to the concentrated leakage has occurred or that an emergency situation exists at Waterbury Dam.
- There is considered to be, beyond a reasonable doubt sufficient, evidence to conclude that adverse conditions exist at the site and the migration of the fines (soil) caused by the seepage has occurred and is presently occurring at the site.
- It is concluded that it would not be prudent to permanently raise the reservoir to the conservation pool level (elevation 592') without additional work.
- It is recommended that modifications be made to the existing low level outlet to increase the discharge capacity for the project.

- It is recommended the multiple piezometer and monitoring wells be installed within the area upstream of the seepage discharge point to measure piezometric levels in the foundation and to obtain measurements of silt content in the seep water at locations where the water first enters the rock toe fill.

- It is recommended that automatic monitoring systems should be installed to record and transmit instrumentation and reservoir data to Department of Water Resources and Environmental Engineering offices.

- It is recommended the multiple piezometers be installed at Station 14 + 00 to verify apparent adverse seep conditions which may exist in this area.

- It is recommended that modifications be made to the existing downstream seepage collection system in order to obtain accurate silt content measurements and accurate estimates for seepage quantities at this location.

- It is recommended that only after the forementioned facilities have been implemented that the reservoir be filled to the conservation pool in stages, collecting data at each stage and evaluating it to determine the safety of the structure.

- Should the monitoring system during the filling of the reservoir or at any subsequent data indicate that further remedial actions are necessary, the reservoir level should be drawn down until the remedial measures are undertaken.

- Should the monitoring indicate the need for remedial action, the remedial action should include the injection of suitable materials into the upstream portion of the existing downstream rock fill toe to prevent the migration of fine grained embankment and/or foundation soils.

TAMS estimates that the cost of modifying the low level outlet will be $400,000, the installation of the monitoring system $180,000, and if necessary, the grouting or injection of material into the downstream rock toe to be $1,950,000. They further estimate that five months would be required to undertake the modifications of the low level outlet and the installation of a monitoring system. If it becomes necessary to inject material into the downstream rock toe, that would take an additional five months.

The Department concurs in the recommendations made by TAMS as they propose a method of placing the dam back into full use, minimizing the risk to the public through thorough monitoring of the status of the dam and increasing our ability to react to changes within the structure through enhanced dewatering capability. It further proposes that the expensive remedial action of establishing a filter in the rock toe of the dam be undertaken only when comprehensive monitoring of the conditions within the dam dictate that it is necessary.

As you are aware, the Department has maintained the position that the problems being experienced at the dam are the result of design and/or construction decisions made by the Corps of Engineers at the time the dam was built. We are, therefore, of the opinion that the costs of making the modifications should be born by the Corps of Engineers. The Corps does not share that viewpoint and has tentatively taken the position that rehabilitation of the dam should be the responsibility of the State of Vermont and that they are precluded by regulation from participating therein. They also have not concurred in our recommendation for enhanced dewatering capability and comprehensive monitoring systems.

During this period of concern and evaluation over the status of the dam, the Department has kept the Vermont Congressional Delegation fully informed. In response to this and other water resource needs of the State, Senator Robert Stafford introduced a bill, S-635, which in part reads as follows:

> "Section 5. The Waterbury, Vermont project in the Winooski River Basin, authorized for modification in section 10 of the 1944 Flood Control Act, approved as Public Law 78-534 of December 22, 1944, is further modified to provide that any major rehabilitation of such project shall be undertaken by the Secretary. . . ."

In addition, Senator Stafford in his introductory remarks stated:

> "Section 5 clarifies the role of the Corps of Engineers concerning major repairs that may be necessary to Waterbury Dam in Vermont. This section assures that any such major repairs at the dam will be undertaken by the Army Corps of Engineers.
>
> Some disagreement has occurred between the State and the Corps over whether the costs for these repairs - concrete work on the spillway and the possible construction of a shield to prevent leaks through the dam - is a Federal or non-Federal responsibility. It is my judgment, supported by that of the State of Vermont, that such work represents major rehabilitation, possibly stemming from design faults in the dam. Because of that fact, these repairs are rightly a Federal expense.
>
> This work, I must note, carries an estimated maximum cost of $3,000,000.00, probably far less. In addition, operating and maintenance responsibility and authority for Waterbury Dam will continue, under this bill, to rest with non-Federal interests."

The Senate Environment and Public Works Committee held hearings on this bill during the week of May 16, 1983 and we anticipate continued progress of the bill toward passage.

We will now work conscientiously with the Corps of Engineers and the Congress of the United States to gain concurrence and implementation of the corrective actions outlined in the TAMS report. We feel it reasonable to expect that appropriate actions could be undertaken to have the reservoir back in operation by the summer of 1984. We do, however, recognize the problems and delays which may occur in getting Senator Stafford's bill through the Congress and the Corps of Engineers to accept our recommendations, implement the design and the construction of the needed works. Unavoidably, delays may occur.

Should we fail to have the project accepted and implemented by the Federal Government, we will seek from the Vermont General Assembly the necessary resources to undertake the renovations as proposed by TAMS.

Please contact me if I can provide you with further information in this regard.

Sincerely,

John R. Ponsetto
Commissioner

JRP/ca
144.1310

State of Vermont

AGENCY OF ENVIRONMENTAL CONSERVATION

Montpelier, Vermont 05602
Department of Water Resources
and
Environmental Engineering

Department of Fish and Game
Department of Forests, Parks, and Recreation
Department of Water Resources & Environmental Engineering
Natural Resources Conservation Council

May 26, 1983

Honorable Robert T. Stafford
Senator
5215 New Senate Office Building
Washington, D.C. 20510

Re: Waterbury Dam

Dear Senator Stafford:

This office has just received the report of the TAMS Engineering firm, entitled "Safety Evaluation of Waterbury Dam, Waterbury, Vermont". A copy is forwarded herewith for your information and if possible insertion into the record to support Section 5 of S-635.

Briefly this report confirms our impression that soils are being eroded from the foundation materials beneath the dam and that this situation is serious enough to warrant two actions being undertaken immediately and before the dam is restored to use.

The first recommendation of the report is for the low level outlet of the dam to be modified to increase our capability of dewatering the dam in response to an emergency situation. The second recommendation is that significant monitoring capability be installed in the dam to allow indepth monitoring during the refilling process and in the ensuing years.

With these two modifications being undertaken the report indicates it would be reasonable to restor the dam to normal operations. Should during the refilling process or in subsequent years, the monitoring indicates further distress within the structure it should be immediately dewatered and a "filter" injected into the rock toe of the dam.

Senator Stafford
Page 2
May 26, 1983

The report indicates the cost of modification to the outlet structure to be $400,000 while the cost of the monitoring system is $180,000. Should, in the future, the filter be required to be injected into the toe this would be a cost of $1,950,000.

The Department concurs in the recommendations of the TAMS Report and is prepared to proceed in that manner. We will immediately be in contact with the New York District of the Corps of Engineers and the Office of Chief of Engineers to expedite their review and approval of the report, assumption of responsibility for the modifications, and their diligent effort toward their implementation. We are also hopeful of speedy passage by the Congress of the United States of your bill, S-635, to clearly establish the authority and direction to the Corps to undertake this work.

We have notified key members of the public of the content of the report and your actions on S-635. A copy of the letter so informing them is attached hereto for your information and possible insertion in the record of S-635.

I wish to express my appreciation for your continuing support of our efforts in this regard. I will keep you appraised of our activities with the Corps of this matter. I would, however, appreciate your best judgment of the fate of S-635 and the timing thereof. Please do not hesitate to contact me if I can provide you with further information or support.

Sincerely,

John

John R. Ponsetto
Commissioner

JRP:arm
Enc: TAMS Report
Letter to Legislators

Senator **Abdnor**. We could start with Mr. Smith coming to the witness table. We will give you 5 minutes. It is better than nothing.

Mr. Smith, why don't you come forward.

Senator **Stafford**. We are very happy to have you here, Michael, as the town manager of Hardwick, Vt. You are testifying with respect to S. 635, which has been referred to this committee and does touch on the problems that the citizens of Hardwick are experiencing whenever ice jams occur in the town.

Since you have very little time, and so do I, I will just say we are glad you are here.

STATEMENT OF MICHAEL SMITH, TOWN MANAGER, HARDWICK, VT.

Mr. **Smith**. Fine, thank you very much.

At the outset I would like to thank the members and Senator Stafford for the opportunity to speak before you today.

We in Hardwick, Vt., have an acute problem. Much of the ice that is generated the total distance of approximately 7 miles upstream on the Zamoille River deposits in part of the downtown district of our community. This is due to many factors, but the primary one is that the gradient of the riverbed levels in the portion of the river adjacent to our village area. This is creating a depository for the ice that moves down from the steeper portions of the river upstream of the village.

The town almost yearly expends great amounts of money and manpower to either clean up the ice or to implement measures to prevent damage to property or loss of life.

S. 635 would help our community because it would give us access to equipment that normally costs the town large sums of money to acquire on a rental basis. With the river taking a huge bite out of our small budget, any relief would be of great benefit to Hardwick.

I would suggest to the subcommittee that operators should accompany any icebreaking devices simply because small communities do not have the expertise to operate such equipment. There is no such language in S. 635 at the moment to state whether operators are included or not.

Although S. 635 addresses a needed option to communities, I do feel there should accompany with this bill a general rethinking in dealing with ice jam problems to provide further options to communities throughout the United States.

A governmental unit, whether local, State, or Federal, simply cannot shoulder the burden of extra costs associated with any particular project. We have to seek alternatives that will do what is desired at a minimal cost to any governmental unit.

For example, in 1975, the Army Corps of Engineers did a study in Hardwick dealing with the ice jam problem. What the study basically concluded was that the benefit/cost ratio was too disproportionate to justify doing any structural modifications as outlined in the report at that time. Costs simply outweigh benefits.

Although there is no denying the validity of the 1975 report in its conclusion on the structural modifications studied, technology has since advanced in roughly the 8 years from the drafting of the report to alter the B/C ratio to a point that would be advantageous to small communities throughout the United States. In other words, the 1975 report was indeed a good base to highlight what could not be done and provided us with the incentive to combine new technologies in research and ice structures to seek low-cost alternatives.

The town of Hardwick has proposed a plan based on the theory that in the days when Hardwick had more dams in the river upstream of the community, there was less—not total elimination—but less of an ice problem incurred upon the community.

Those dams, once removed in the 1950's and early 1960's, heightened the frequency of Hardwick's ice problems in proportion to the number of dams removed. To replace all the dams removed in my opinion cannot be economically justified at this particular point in time. However, what can be done in my opinion is to recreate the effects of those dams at a cost that can be justified.

To recreate the effects of those dams, the town has proposed to place in-channel structures as in ice booms, and also to provide off-channel ice storage areas, such as in nonutilized or low-risk fields.

The Army's Cold Regions Lab in Hanover, N.H., has express interest and support in this sort of concept. If this concept work's in an acute ice problem area such as Hardwick it may provide relatively low cost alternatives to other communities throughout the United States.

Such a demonstration project would consist of three phases: An evaluation phase with a winter regime study of the river by the Cold Regions Lab. A design phase, to design the recommendations made by Cold Regions and a construction phase.

The Project time frame would be in my estimation 2-years—startup to completion. However you could fast-track the project, constructing elements of the project as they come off the drawing board instead of waiting for total design phase completion. That could, in my estimation, bring it in to a 12-month timeframe.

Total project costs would run in the $200,000 range, roughly 70 to 90 percent lower than the structures evaluated in the 1975 study. Annual maintenance costs would be minimal compared to structures evaluated in 1975.

In my opinion S. 635 would be the best vehicle to lower financial burdens placed on all levels of government in dealing with ice problems on a relatively small river. It certainly should enhance the B/C ratio to smaller communities.

I also feel that this sort of approach not only will be of great benefit to Hardwick but to many other communities and sincerely feel this bill should specifically include funding for such a demonstration project.

Members of the subcommittee, I thank you for your time.

Senator **Abdnor**. Thank you, Mr. Smith.

S. 912

Senator **Stafford**. Mr. Mayor, I think I introduced the bill with respect to what you are about to testify on.

Mr. **Davis**. Yes, sir. Thank you very kindly.

Senator **Stafford**. We have just about 3 minutes before second bills ring on us.

STATEMENT OF JIMMY DAVIS, MAYOR, ABBEVILLE, S.C.

Mr. **Davis**. I will go straight to the bone. Thank you, Mr. Chairman, distinguished members.

We are in a little dilemma in the town of Abbeville, S.C. The corps has built the Richard B. Russell Dam and Reservoirs, and by the construction of this they are going to back water up to the hydroelectric plant. We are the only city in South Carolina that owns its own electric plant. We produce about 35 percent of our own electrical power.

When the water is backed up against our electrical plant, we will then lose approximately 15 to 19 percent of our generating capacity. So it would be a devastating blow to our community economically if we lose this electrical generation that we have now. So we are asking you all to help us.

The Corps of Engineers, when they first came in there, did allude to the point that we would not lose any kilowatt power, or they would at least replace kilowatt for kilowatt.

We are not up here asking for anything, sir. We are just asking to be left as good as we were found.

Senator **Stafford**. That seems reasonable to me.

Mr. **Davis**. I think so, too, Senator.

Senator **Abdnor**. I will just say, as chairman, I think you introduced the bill.

Senator **Stafford**. Yes, I did.

Mr. **Davis**. We are very, very appreciative of that, sir.

Senator **Abdnor**. I will tell you, you are very fortunate that the chairman carried you here.

Mr. **Davis**. I think we are, too.

Senator **Stafford**. We better all quit while we are ahead.

Mr. **Davis**. I think so, too. Thank you very much.

Senator **Abdnor**. To the rest of the witnesses, let me say, I am sorry this had to happen, but they are getting ready to vote. I assure you everyone will have an opportunity to be heard tomorrow. Senators Jackson and Gorton want to testify. I would think maybe the gentleman testifying on behalf of the Governor would also probably want to do it all at one time tomorrow. I hope I am correct in saying that.

We don't really have any other alternative. Sorry this had to be a short meeting. But we thank you for coming and look forward to seeing you tomorrow.

The hearing is adjourned.

[Whereupon, at 3:20 p.m., the subcommittee was recessed, to reconvene at 10 a.m. on Wednesday, May 18, 1983.]

[Mayor Davis' statement, a statement from Senator Thurmond, and the bills S. 635 and S. 912 follow:]

The City of Abbeville, S. C.
Executive Department
P. O. Box 456
Abbeville, South Carolina
29620

JIMMY DAVIS
MAYOR

PH. 459-2900

May 20, 1983

The Honorable James Abdnor
Chairman Sub-Committee
On Water Resources
Senate Office Building
Washington, DC 20515

Dear Senator Abdnor:

I am pleased to have this opportunity to appear before you and the other distinguished members of this Sub-Committee to testify in support of S. 912, a bill to modify the authority for the Richard B. Russell Dam and Lake project, a hydro electric plant now being constructed by the Corps of Engineers.

The City of Abbeville and its citizens were enticed to support the Richard B. Russell Dam and Lake project in part upon the promise of the U. S. Army Corps of Engineers that they would be provided power from the project at a cost comparable to that generated by their own facility to compensate for any loss of generating capacity at that facility resulting from the construction and operation of the project. Once the project had gotten well underway, however, the Corps of Engineers determined that they lacked the statutory authority to make good on this promise under the legislation authorizing the construction and operation of the project.

Mr. Chairman, suffice it to say that this revelation had a devastating impact on the confidence of the City and its people in the Corps of Engineers, and caused grave misgivings about the benefits of the project. Many felt as if they had been purposefully misled into supporting the project, and would now have to pay dearly for this deception.

Mr. Chairman, I do not intend by my remarks to intimate that the Corps of Engineers acted in bad faith in misrepresenting their authority in this matter. I do believe, however, that the time has now come for this situation to be corrected, since the impoundment of the waters at the project should begin reducing the generating capacity of the Lake Secession facility within less than a year.

Mr. Chairman, the legislation being introduced today does no more than give the Secretary of the Army the authority to live up to the commitment made some time ago by the Corps of Engineers.

The Honorable James Abdnor
Chairman Sub-Committee
On Water Resources
Senate Office Building
Washington, D. C. 20515
May 20, 1983
Page - Two

It is intended to modify the legislation authorizing the Richard B. Russell dam and Lake project only so far as is necessary to authorize the Secretary to provide the City of Abbeville a kilowatt hour of power for every kilowatt hour by which the construction and operation of the project reduces the generating capacity of the Lake Secession facility. In this way, all parties involved will find themselves in exactly the same positions as they had originally contemplated.

The City of Abbeville has long owned and operated a hydroelectric plant on the Rocky River at Lake Secession. Currently, this plant produces approximately 31% of the areas power requirements at very reasonable costs. As a direct result of the Russell Dam, the water level in the Lake immediately downstream of the City's plant, and backing up to it, will be raised. This will result in a shorter fall for the water flowing through the City's plant. Consequently, the power output of the plant, which has a remaining useful life of about 50 years, will be reduced by approximately 15%.

Mr. Chairman, it is manifestly clear that the power loss experienced by the City's plant would amount to a "taking" of property from the City by the Federal Government. As we know, the Constitution requires that whenever the Government takes something of value, as in this case, the Government must make just compensation. That is the precise purpose of this bill: to compensate the City of Abbeville for its power loss attributable to the Richard B. Russell Dam and Lake project. (See Annex A for information, "Report On The Effects Of Lake Russell On Lake Secession Power Plant")

Thank you for your time and consideration.

Sincerely,

Jimmy Davis

Jimmy Davis
Mayor

JD:bet

Enclosure: Copy of Annex A, "Report On the Effects Of Lake Russell On Lake Secession Power Plant"

CC: Senator Strom Thurmond
Washington, DC 20515

ANNEX A

REPORT ON THE EFFECTS
OF LAKE RUSSELL ON
LAKE SECESSION POWER PLANT

5-14-83

BY

M. G. MOORHEAD, PE

MANAGER

ABBEVILLE WATER & ELECTRIC PLANT

I. INTRODUCTION

One of the consequences of the construction of the Richard B. Russell Dam and Reservoir is the raising of the tailwater elevation at our Lake Secession Hydro Plant. This will result in a loss of generation at this plant. This report is being made to give an estimate of the amount of these losses in terms of capacity and generated energy.

II. COMMENTS

This report is being made after studying the Dames & Moore Report which was done for the U. S. Army Engineer District, Savannah, and in general finds the losses to be somewhat greater than the Dames & Moore Report.

In general, my evaluation shows a loss of head of 7.5 feet maximum, a loss of capacity of 287 KW, and a loss in generated energy of 88,188 KWH per month. The calculations of these figures are shown in the following estimates.

III. CONCLUSIONS

In order to compensate for these losses, the Abbeville Water & Electric Plant should receive from SEPA, at no cost, an allocation of not less than 287 KW demand and 88,188 KWH monthly.

IV. CAPACITY LOSS ESTIMATE

A. Maximum Loss of Head

Present Tailwater Elevation	468.5
Maximum Tailwater Elevation after Russell	476.0
Maximum Headwater Elevation	548.0
Present Maximum Head = 548.0 - 468.5 =	79.5'
Maximum Head with Russell @476.0 = 548.0-476.0 =	72.0'

Maximum Loss of Head = 79.5 - 72.0 = 7.5' or 9.4%

B. Generator #1 Maximum Capacity Loss (Large Unit)

1. Present Turbine #1 Maximum Output 2600 Hp

   (From Turbine Performance Curves at 79.5' Head and 90% Efficiency)

   Present Generator #1 Output =

   $$2600 \text{ Hp} \times \frac{.746 \text{ KW}}{\text{Hp}} \times .946 = 1835 \text{ KW}$$

   (At 79.5' Head and 94.6% Efficiency)

2. Turbine #1 Maximum Output After Russell 2320 Hp

   (From Turbine Performance Curves at 72.0' Head and 90% Efficiency)

   Generator #1 Output After Russell =

   $$2320 \text{ Hp} \times \frac{.746 \text{ KW}}{\text{Hp}} \times .945 = 1635\text{KW}$$

   (At 72.0' Head and 94.5% Efficiency)

3. Net Capacity Loss for Generator #1 =

   1835 KW - 1635 KW = 200 KW or 10.9%

C. Generator #2 Maximum Capacity Loss (Small Unit)

1. Present Turbine #2 Maximum Output 1250 Hp

(From Turbine Performance Curves at 79.5' Head and 90% Efficiency)

Present Generator #2 Output =

$$1250 \text{ Hp} \times \frac{.746 \text{ KW}}{\text{Hp}} \times .94 = 877 \text{ KW}$$

(At 79.5' Head and 94.0% Efficiency)

2. Turbine #2 Maximum Output After Russell 1130 Hp

(From Turbine Performance Curves at 72.0' Head and 90% Efficiency)

Generator #2 Output After Russell =

$$1130 \text{ Hp} \times \frac{.746 \text{ KW}}{\text{Hp}} \times .937 = 790 \text{ KW}$$

(At 72.0' Head and 93.7% Efficiency)

3. Net Capacity Loss for Generator #2 =

877 KW - 790 KW = 87 KW

D. Net Plant Capacity Loss

Net Loss = 200 KW + 87 KW = 287 KW

V. GENERATED ENERGY LOSS ESTIMATE

A. Present Average Yearly Generation = 10,000,000 KWH

(For 10 Year Period from 1968 to 1977)

Present Plant Capacity = 2712 KW

(See Capacity Loss Estimate)

Plant Capacity After Russell = 2425 KW

(See Capacity Loss Estimate)

B. Plant Factor Hours $= \dfrac{\text{10,000,000 KWH}}{\text{2712 KW}} =$ 3687.3 Hrs.

C. Average Yearly Generation After Russell =

2425 KW x 3687.3 Hrs. = 8,941,740 KWH

D. Net Yearly Energy Loss After Russell =

10,000,000 KWH - 8,941,740 KWH = 1,058,260 KWH

Or An Average Monthly Loss of 88,188 KWH

VI. MONETARY LOSS ESTIMATE

A. Monthly & Yearly Loss Estimate

Estimated KW Monthly Loss	287 KW
Estimated KWH Monthly Loss	88,188 KWH
Present Duke Demand Charge	$6.25/KW/Mo.
Present Duke Energy Charge	2.3360¢/KWH/Mo.

Total Monthly Monetary Loss @ Current Rates =

$$\left(\frac{\$6.25}{\text{KW}} \times 287\right) + \left(\text{88,188 KWH} \times \frac{\$.02336}{\text{KWH}}\right) = \$3853.82$$

Total Yearly Monetary Loss @ Current Rates =

$3853.82 x 12 = $46,245.85

B. Projected Loss Estimate

	Average Increase in Duke Rates of		
	0%	5%	10%
Total First Year Cost	46,246	46,246	46,246
Total 10 Year Cost	462,460	581,675	737,033
Total 20 Year Cost	924,920	1,529,161	2,648,709

TABLE 3.2

GENERATOR SPECIFICATIONS

Specification	Large Unit	Small Unit
Rating (KVA)	2250	1000
Power Factor (%)	80	80
Phase	3	3
Cycles	60	60
Volts	2400	2400
Speed (RPM)	300	400
Efficiency (%)		
@ 1/2 Load	93.3	92.3
@ 3/4 Load	94.4	93.7
@ 4/4 Load	94.6	94.0

Source: The Westinghouse Electric & Manufacturing Co., 1939.

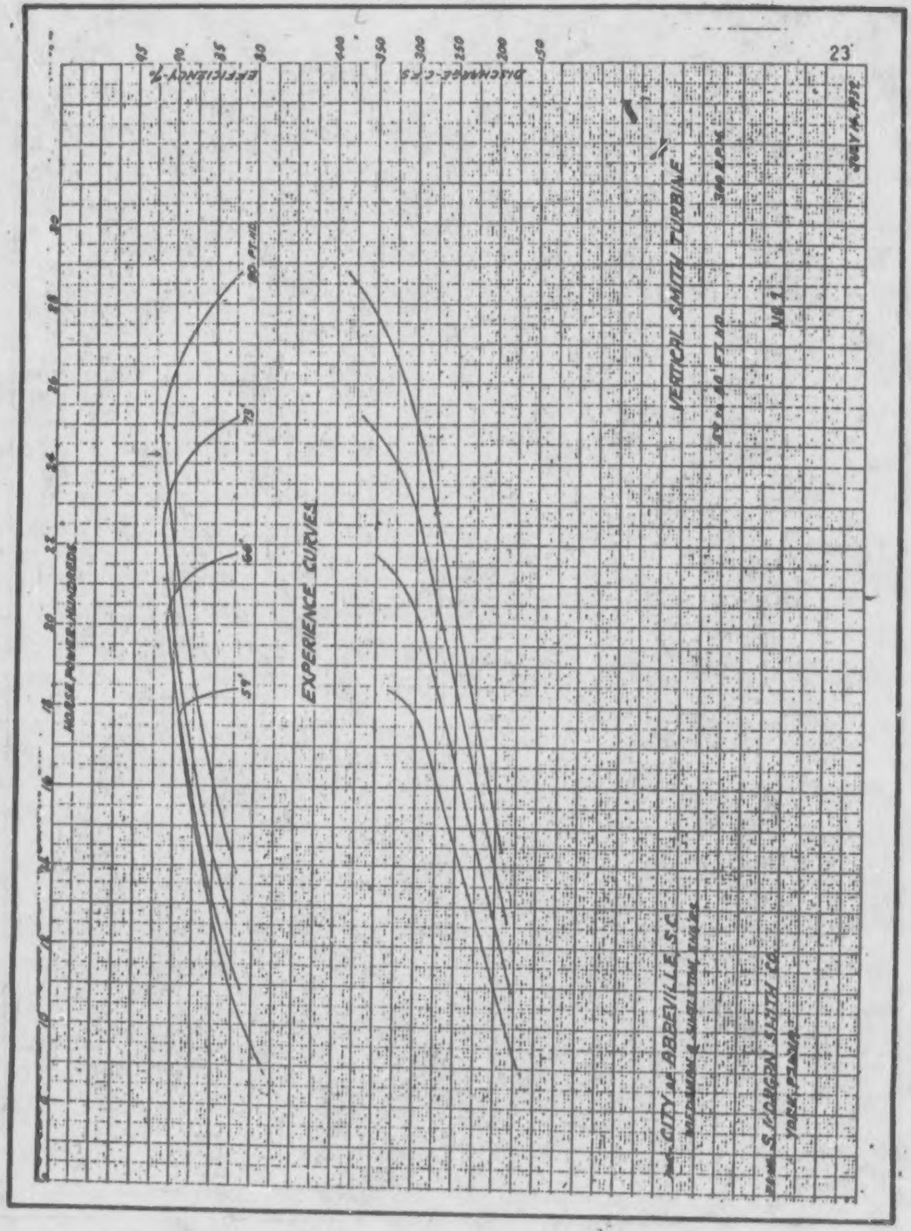


Figure 3.1 Original Turbine Performance Curves, Large Unit.

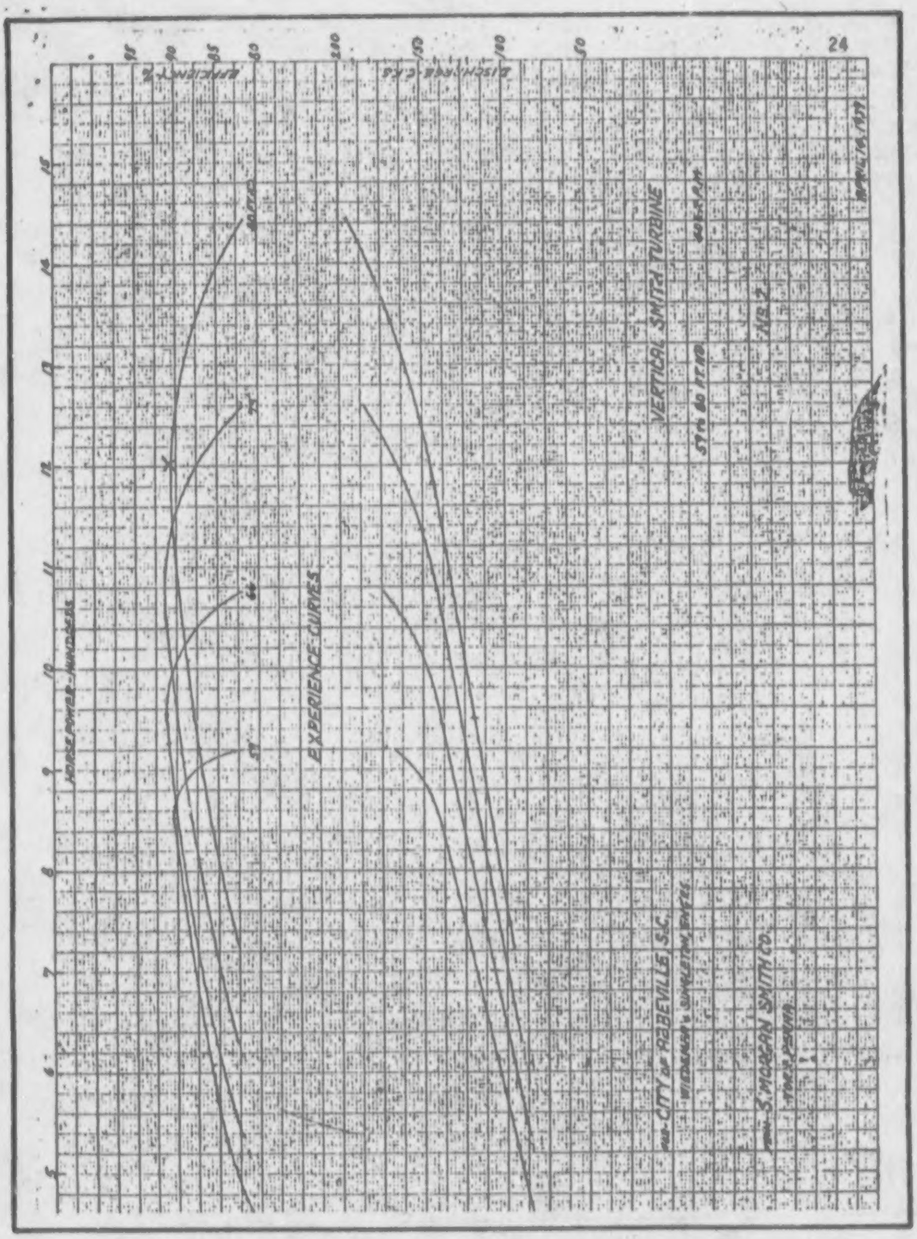
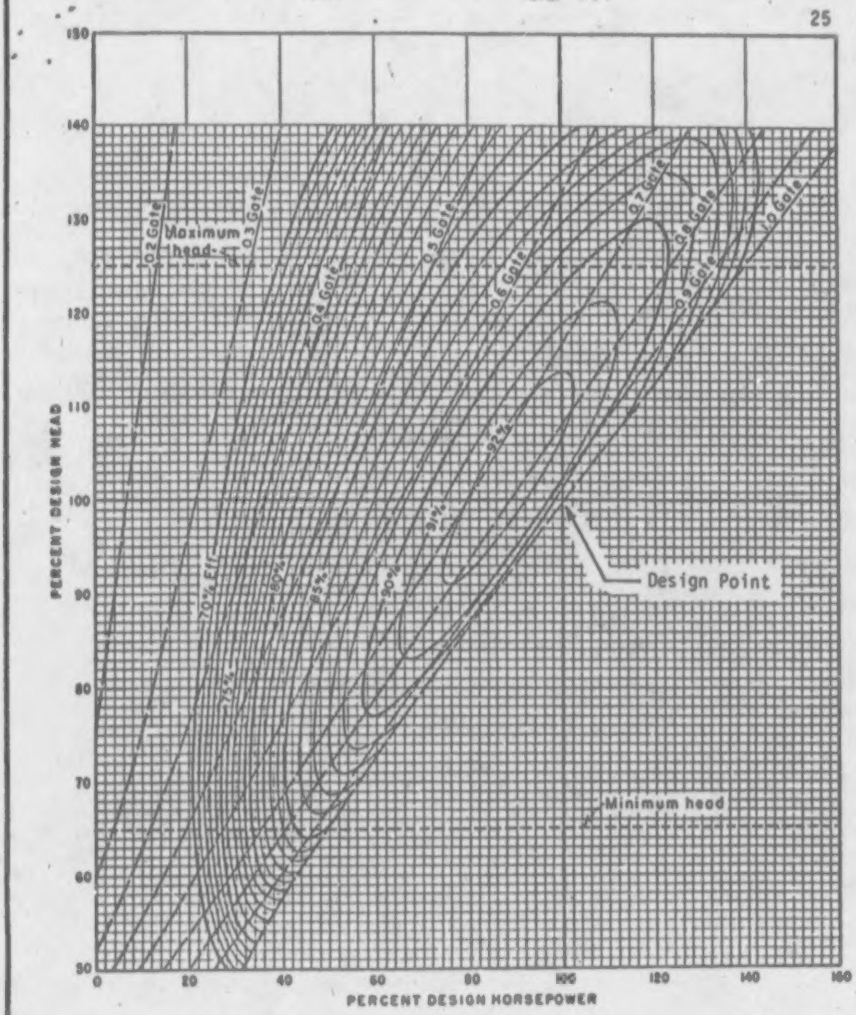


Figure 3.2 Original Turbine Performance Curves, Small Unit.



FRANCIS TURBINE PERFORMANCE - 75 TO 150 FEET
HEAD vs HORSEPOWER

SOURCE: U.S. BUREAU OF RECLAMATION, 1954

Figure 3.3 General Francis Turbine Performance Curves.

STATEMENT BY SENATOR STROM THURMOND (R-S.C.) BEFORE THE SENATE SUB-COMMITTEE ON WATER RESOURCES OF THE COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS REFERENCE S. 912, A BILL TO MODIFY THE AUTHORITY FOR THE RICHARD B. RUSSELL DAM AND LAKE PROJECT. MAY 17, 1983.

MR. CHAIRMAN:

I am pleased to have this opportunity to appear before you and the other distinguished members of this sub-committee to testify in support of S.912, a bill to modify the authority for the Richard B. Russell Dam and Lake Project, a hydroelectric plant now being constructed by the Corps of Engineers.

Mr. Chairman, this bill, which has been introduced by Senator Robert Stafford, the distinguished Chairman of the Committee on Environment and Public Works, and myself, will authorize the Secretary of the Army to provide such amount of electrical power to the city of Abbeville, South Carolina, as is required to offset any reduction in power generated by the city-owned hydroelectric facility at Lake Secession as a result of the construction of the Richard B. Russell Hydroelectric Project. I am pleased that this measure has the support of the Reagan Administration, including the Secretary of the Army and the Defense Department, who have submitted it to Congress and requested its prompt enactment. This reimbursement-in-kind is necessary in order to place the city of Abbeville and area residents in as good a position after the Russell project is completed as they were before the construction of the project.

The City of Abbeville has long owned and operated a hydroelectric plant on the Rocky River at Lake Secession. Currently, this plant produces approximately 31% of the area's power requirements at very reasonable costs. As a direct result of the Russell Dam, the water level in the Lake immediately downstream of the city's plant, and backing up to it, will be raised. This will result in a shorter fall for the water flowing through the city's plant. Consequently, the power output of the plant, which has a remaining useful life of about 50 years, will be reduced by approximately 15%.

Mr. Chairman, it is manifestly clear that the power loss experienced by the city's plant would amount to a "taking" of property from the city by the Federal Government. As we know, the Constitution requires that whenever the Government takes something of value, as in this case, the Government must make just compensation. That is the precise purpose of this bill: to compensate the city of Abbeville for its power loss attributable to the Richard B. Russell Dam and Lake Project.

Mr. Chairman, I would like to point out that, when this project was in the planning stages, the people of Abbeville gave their support to it, based upon Corps' promises that they would be held harmless against any loss in generating capacity. However, as the project neared completion, Corps' officials, acting in good faith, discovered that the Corps did not have the necessary legal authority to institute a replacement-in-kind program. Under present law, the only relief available would be the construction of remedial works tc try and restore the lost generating capacity.

Mr. Chairman, I am informed that an undertaking of that type would involve state-of-the-art technology costing from $3 to $20 million. Moreover, it is not certain that this remedial technique would be completely successful.

Under S.912, however, a very simple, logical, and economical solution can be achieved. By providing the city with an in-kind transfer of electric power equal to the amount lost, the city would be restored to its status quo. Under this approach, there would be no need to design and build costly technical refinements to boost generating capacity of the Abbeville Lake Secession plant. The cost associated with administration of this plan has been estimated by the Corps of Engineers to run about $10,000 per year during the Abbeville plant's remaining useful life. This cost will be treated as a joint cost of the project, to be allocated among all project purposes. This is a small price to pay, especially when compared with the alternative approach.

Mr. Chairman, I strongly urge Committee approval of this bill, which, as earlier stated, was introduced at the request of the Administration. We feel this is the most economical and equitable way to resolve the question of compensation and do justice to the City of Abbeville in respect to its power facility.

In the consideration of this measure, I would respectfully urge swift action. The project schedule calls for filling of the Russell Reservoir to begin in September of this year, with the power pool reaching its maximum elevation in December, 1984. One can readily see that time is of the essence.

Because of the urgency of this issue, I would ask that this measure be considered both as a separate bill, and as a part of the omnibus water resources bill now being considered by this sub-committee. I urge this sub-committee to act on this measure as soon as possible so that the people of Abbeville can be assured of the power replacement they have been promised.

Because of their deep interest in this issue, the following prominent officials of the city of Abbeville are here to participate in this hearing today. It is my pleasure to introduce to you:

The Mayor of the City of Abbeville, Mr. James E. Davis;

City Councilmen, Mr. Robert Strickland, Mr. Charles Williams, and Mr. Jack Farmer;

The City Manager, Mr. David Krumwiede;

The Director of Water and Electrical Plants; Mr. Michael G. Moorehead;

The City Attorney; Mr. Thomas Hite, Jr.;

The Director of the Abbeville Development Board, Mr. George Settles;

The Director of the Chamber of Commerce, Mr. Walter Cooper; and

The Chairman of the City Election Commission, Mr. Dave Simmons.

Mr. Chairman, Mayor Davis would like to make a statement about the nature of the hydroelectric problem facing the city of Abbeville as a result of the construction of the Richard B. Russell Dam and Lake project.

Mr. David Krumwiede, the City Manager, will submit a written statement. I ask unanimous consent that it be included in the Record.

Thank you again, Mr. Chairman, for allowing me the opportunity to testify before you today on this matter of great importance to a number of citizens in my State.

II

98TH CONGRESS
1ST SESSION

S. 635

To authorize the United States Army Corps of Engineers to provide assistance to local communities, and for other purposes.

IN THE SENATE OF THE UNITED STATES

MARCH 1 (legislative day, FEBRUARY 23), 1983

Mr. STAFFORD introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works

---

A BILL

To authorize the United States Army Corps of Engineers to provide assistance to local communities, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may be cited as the "Small Communities Water Resources Assistance Act of 1983".

RIVER ICE CONTROL

SEC. 2. (a) The Secretary of the Army acting through the Chief of Engineers (hereinafter referred to as the "Secretary") shall undertake a program of research for the control of river ice, and to assist communities in breaking up such ice, which otherwise is likely to cause or aggravate flood damage or severe streambank erosion.

(b) The Secretary is further authorized to provide technical assistance to local units of government to implement local plans to control or break up river ice. As part of such authority, the Secretary shall acquire necessary ice-control or ice-breaking equipment that shall be loaned to local units of government.

(c) For the purposes of this section, the sum of $5,000,000 is authorized to be appropriated to the Secretary in each of the fiscal years ending September 30, 1984, September 30, 1985, and September 30, 1986, such sums to remain available until expended.

(d) No later than March 1, 1986, the Secretary shall report to the Congress on activities under this section.

IMPROVEMENTS AT FORMER INDUSTRIAL SITES

SEC. 3. (a) The Secretary shall, upon the request of local public officials, survey the potential and methods for rehabilitating former industrial sites, millraces, and similar types of facilities already constructed for use as hydroelectric facilities. The Secretary shall, upon request, provide technical assistance to local public agencies, including electric cooperatives, in designing projects to rehabilitate sites that have been surveyed, or are qualified for survey, under this section.

(b) There is authorized to be appropriated to the Secretary, to implement this section, the sum of $5,000,000 for each of the fiscal years ending September 30, 1984, September 30, 1985, and September 30, 1986, such sums to remain available until expended.

STREAMBANK EROSION CONTROL

SEC. 4. (a)(1) The Congress finds that streambank erosion destroys property, both public and private, creates and aggravates flooding, increases sedimentation in the Nation's rivers, adds to the needs for disaster assistance in many areas, and creates significant financial and environmental losses to the Nation.

(2) The Congress, therefore, declares that it is in the national interest to assist communities and individuals in lessening and, when possible, preventing the erosion of streambanks and riverbanks, particularly when such erosion threatens, or can be expected to threaten, public and private facilities and structures.

(b)(1) The Secretary shall provide technical assistance in methods to retard streambank and riverbank erosion to any person or agency requesting such assistance, if the applicant is experiencing, or can be expected to experience, erosion threatening dwellings or loss of property. The Secretary may also provide assistance to an applicant who would be likely to be affected by flooding downstream from property threatened by erosion: *Provided*, That the owner of such property agrees to allow the applicant to perform such erosion retarding work.

(2) For the purposes of this subsection, the sum of $2,000,000 is authorized to be appropriated to the Secretary in each of the fiscal years ending September 30, 1984, September 30, 1985, and September 30, 1986, such sums to remain available until expended.

(c)(1) The Secretary is authorized to provide loans, to be repaid within ten years, of up to $10,000 to any public or private group or agency or individual for the purpose of stabilizing streambanks or riverbanks when erosion of such streambanks or riverbanks threatens, or can be expected to threaten, any facility or structure, or produce or seriously aggravate the danger of flooding. Plans for any work to be undertaken with a loan under this subsection shall be submitted to the Secretary. Approval by the Secretary of such plans shall be a commitment of the Secretary to such loan. Notwithstanding the first sentence of this subsection, any loan to a public agency may be for a period of twenty years and for a sum up to $25,000. Loans granted under this section shall be free of interest. Repayment shall be required in equal installments.

(2) For the purposes of this subsection, the sum of $50,000,000 is authorized to be appropriated to the Secre-

tary for the fiscal year ending September 30, 1984, and thereafter, and shall remain available until expended.

WATERBURY DAM, VERMONT

SEC. 5. The Waterbury, Vermont, project in the Winooski River Basin, authorized for modification in section 10 of the 1944 Flood Control Act, approved as Public Law 78–534 of December 22, 1944, is hereby further modified to provide that any major rehabilitation of such project shall be undertaken by the Secretary. Nothing is this section shall be construed as altering the conditions established in the Federal Power Commission license numbered 2090, issued on September 16, 1954.

II

98TH CONGRESS
1ST SESSION

S. 912

To modify the authority for the Richard B. Russell Dam and Lake project, and for other purposes.

IN THE SENATE OF THE UNITED STATES

MARCH 23 (legislative day, MARCH 21), 1983

Mr. STAFFORD (for himself and Mr. THURMOND) (by request) introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works

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A BILL

To modify the authority for the Richard B. Russell Dam and Lake project, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Richard B. Russell Dam and Lake project, authorized by the Flood Control Act of 1966 (80 Stat. 1420), is hereby modified to authorize the Secretary of the Army, acting through the Chief of Engineers, to provide such power to the city of Abbeville, South Carolina, as the Secretary determines to be necessary to mitigate the reduction in hydroelectric power produced at the city-owned hydroelectric plant at Lake Secession caused by the construction and operation of the project. Such power shall be provided to the city for a period not to exceed the remaining service life of the city-owned hydroelectric plant as part of the operational requirements and costs of the project under such terms and conditions as the Secretary, in consultation with the Secretary of Energy, determines to be appropriate. The Secretary of Energy is authorized to provide assistance in the delivery of such power.

OMNIBUS WATER RESOURCES LEGISLATION

WEDNESDAY, MAY 18, 1983

U.S. Senate,
Committee on Environment and Public Works,
Subcommittee on Water Resources,
Washington, D.C.

The subcommittee met at 10 a.m., in room SD-406, Dirksen Senate Office Building, Hon. James Abdnor (chairman of the subcommittee) presiding.

Present: Senators Abdnor and Humphrey.

OPENING STATEMENT OF HON. JAMES ABDNOR, U.S. SENATOR FROM THE STATE OF SOUTH DAKOTA

Senator **Abdnor**. The subcommittee will come to order.

Senator Gorton will be here in a moment. This morning, the Subcommittee on Water Resources will first hear from those witnesses who were not able to address this committee yesterday afternoon. Thereafter, the committee will hear testimony from Dr. Alice Rivlin, the Director of the Congressional Budget Office, on the subject of water resources costsharing. The subcommittee requested the Congressional Budget Office to perform an in-depth review of water resources costsharing last year and I believe that study is near completion.

Before we begin today, I want to make a few comments for the record on the water resources costsharing policy. There is absent at today's hearing administration spokesmen on the subject. There is no one from the administration to testify on this subject. This is not because this committee has not tried to get an administration spokesman. We invited the Director of the Office of Management and Budget, the Assistant Secretary of the Interior for Land and Water Resources, and the Assistant Secretary of the Army for Civil Works to testify today. All declined.

I recently wrote to the President communicating some of my personal ideas on this subject with which the administration may agree or disagree. I do not know. This committee does not know and the Congress does not know. This is a very difficult issue for the 535 elected Members of Congress to address in the absence of administration direction. I made it clear that I intend to address this issue this year and intend to do so beginning today.

I hope the administration will soon have a costsharing policy for water resources development which this committee and the Congress can address in its deliberations on this very important subject.

Having said that, we will now start. We will wait a few seconds for Senator Gorton and, believe me, I know what he is up against. He is a very important man on the Budget Committee and that seems to be the No. 1 issue. He wants to be heard here and he is very interested in this subject as are other people from Washington.

Senator Jackson has arrived. Maybe we will just wait a few more minutes.

I would note that Senator Glenn would like to enter a statement in the record in support of the Maumee Bay State Park shoreline protection project in Ohio. If there is no objection, Senator Glenn's written statement will be made a part of the record.

I also have been requested by Representative Don Bonker to submit his written statement for the record in support of the interim authority for the Mount St. Helens Recovery Operation before this subcommittee.

[Senator Glenn's and Representative Bonker's statements follow:]

STATEMENT OF HON. JOHN GLENN, U.S. SENATOR FROM THE STATE OF OHIO

Mr. Chairman, I would like to thank you for this opportunity to address the Subcommittee on Water Resources on the importance of the shoreline erosion protection project at Maumee Bay State Park in Northwest Ohio. The potential benefits this project could bring to this depressed area are remarkable. Also, the cost sharing formula provides the Federal government an opportunity to maximize return on investment.

The potential benefits are several: Industrial development, increased job opportunity in a high unemployment area, expanded recreation facilities and environmental protection. In addition to improving the recreational facilities in the area, the improved park is expected to act as a catalyst to promote new Toledo convention trade. As such, the project would substantially enhance the quality of life in Northwest Ohio.

This is not a go-it-alone expenditure for the Federal Treasury. The State of Ohio has agreed to finance approximately one-third of the estimated $10.396 million project. The State has also expressed an interest in completing the overall development of the Maumee Bay State Park currently estimated at $36 million.

The immediate problem, however, is to halt shoreline erosion at the 1,700 acre park adjoining the Cedar Point National Wildlife Refuge in Lucas County, Ohio. Erosion is destroying the shoreline at the rate of 12 feet per year and unless the deterioration is stopped, the State of Ohio cannot continue with its major development plans at Maumee Bay State Park. Already the State has invested more than $2 million.

Now, an investment of Federal funds is needed to make this valuable property an outdoor asset to everyone.

Once again I would like to thank Mr. Abdnor for the opportunity to testify before the Subcommittee.

STATEMENT BY REP. DON BONKER
IN SUPPORT OF INTERM AUTHORITY FOR THE MOUNT ST. HELENS RECOVERY OPERATION
BEFORE
THE SUBCOMMITTEE ON WATER RESOURCES
May 17, 1983

Mr. Chairman, I would like to express my support for S.1028, sponsored by Senators Jackson and Gorton. This legislation, which I introduced in the House of Representatives, would provide 100-year flood protection for developed areas downstream of Mount St. Helens in Washington State.

The measure would also provide the Army Corps of Engineers with the interim authority to control the region's volcanic sediment problem in the most cost-effective manner until such time as permanent solutions to the problem are in place. Although the President is scheduled to recommend permanent solutions for the Mount St. Helens disaster in November, it may take 5 or 6 years to implement these recommendations. In the meantime, authority is needed to deal with the nation's most unique continuing disaster.

Since the May 18th, 1980 eruption of Mount St. Helens, which ejected three billion cubic yards of unstable mud and volcanic debris into the Toutle River valley, the Corps has relied upon the emergency authority contained in P.L. 84-99 to control the flow of sediment and take other protective measures. As currently interpreted, P.L. 84-99 provides neither the flexibility nor the ability to plan ahead in the effort to deal with this continuing disaster.

The emergency P.L.-99 work is limited to reacting to "imminent flood threats" -- emergency stopgap measures -- and generally does not permit a coherent long range response to the sediment and flood threats we face. This situation is clearly unsatisfactory and does not provide authority for the planning and budgeting necessary to maximize the effectiveness and efficiency of the Corps' efforts in the region.

As a result, the level of protection provided by the Corps for the areas downstream of the volcano has fluctuated. After the initial cleanup operation in 1981 by the Corps, the residents along the Cowlitz River enjoyed 500-year flood protection. This margin of safety, and the federal investment in flood preventive measures, was almost eliminated by the spring of 1982 because of inaction. Frantic emergency measures were necessary in the summer and fall of that year to restore 100-year protection. After a relatively mild winter this year, some areas along the Cowlitz are down to 10-year protection.

The two most compelling reasons for an interim authorization for Mount St. Helens are cost effectiveness and safety.

First, upstream removal of sediment on the Toutle River is the least expensive method of sediment control. This last winter, approximately three million cubic yards of material was removed from the Toutle at a cost of less that $1 a cubic yard. This compares with costs three to seven times as high for downstream removal from the Cowlitz or Columbia rivers. In addition, the massive volume of material that would have to be dredged from the Cowlitz and Columbia would fill all existing disposal sites in just a few years without upstream control. From a purely budgetary perspective, upstream sediment control in the Toutle is the best solution and project authority is necessary to conduct a coordinated sediment control program on the Toutle.

Second, sediment control on the Toutle provides a much greater margin of safety for communities along the Cowlitz river. Since sediment infill in the Cowlitz and Columbia is minimized, the rivers can accommodate greater flows during periods of heavy runoff. This additional safety feature could be the greatest economy for all, as major flooding of the area would cost the federal government hundreds of millions, or even billions, of dollars in disaster assistance and flood insurance. Despite high unemployment and disaster recovery costs, area residents have purchased over $900 million in Federal Flood Insurance.

In addition, interim project authority and upstream sediment control is compatible with the most promising proposals for permanent solutions now being evaluated. We have seen that attempts to postpone necessary work downstream of the volcano only leads to greater future cost and puts tens of thousands of people at great risk of flooding.

Mr. Chairman, it is vital for the people of Washington state and for all users of the Columbia River system that this interim authorization is enacted in the near future. Delaying action on this pressing problem will only cost the federal government more money in the long run and increase the risk of flooding. I urge the committee to include interim authority for the Mount St. Helens operation in S.947.

COWLITZ COUNTY, WASH.

Senator **Abdnor**. I want to say to the people from Washington that we apologize for keeping you over an extra day. We regret that. Scheduling in the Senate is, at times uncertain. Yesterday, activity on the floor made it impossible to try to hold a hearing. We do appreciate your staying on another day in the good hands of Senator Jackson.

Please go ahead.

STATEMENTS OF HON. HENRY M. JACKSON, U.S. SENATOR FROM THE STATE OF WASHINGTON AND HON. SLADE GORTON, U.S. SENATOR FROM THE STATE OF WASHINGTON

Senator **Jackson**. Mr. Chairman, with us at the table is Mr. William Paris, who is representing the Governor of the State of Washington, and his assistant, Mr. Van Youngquist who is chairman of the board of the county commissioners for Cowlitz County.

Before hearing from them in behalf of Senator Gorton and myself, we would like to place in the record a joint statement on all of the projects that are involved in this discussion this morning.

Senator **Abdnor**. That will be fine.

Without objection it will be made a part of the record.

[The statement referred to follows:]

SENATORS JACKSON AND GORTON
TESTIMONY BEFORE
SENATE SUBCOMMITTEE ON WATER RESOURCES
ON
THE WATER RESOURCES DEVELOPMENT ACT OF 1983

MR. CHAIRMAN AND MEMBERS OF THE SUBCOMMITTEE:

WE APPRECIATE THIS OPPORTUNITY TO APPEAR BEFORE YOU TO TESTIFY ON SENATE BILL 947, THE WATER RESOURCES DEVELOPMENT ACT OF 1983.

WE WOULD LIKE TO REQUEST THAT THE FOLLOWING LEGISLATION BE INCLUDED IN YOUR OMNIBUS WATER RESOURCES BILL WHEN IT IS REPORTED FROM COMMITTEE.

FIRST: WE WOULD LIKE TO CALL YOUR ATTENTION TO LEGISLATION (S.1028) WE INTRODUCED ON APRIL 12 TO PROVIDE INTERIM AUTHORITY FOR THE CORPS TO PERFORM FLOOD PROTECTION WORK IN THE COWLITZ RIVER AREA.

MR. CHAIRMAN, IT HAS BEEN THREE YEARS SINCE THE MAY 18 1980 ERUPTION. THE CORPS HAS SPENT $312 MILLION TO DATE FOR EMERGENCY DREDGING AND LEVEE PROTECTION. YET THE COMMUNITIES ALONG THE COWLITZ RIVER STILL LIVE WITH THE THREAT OF FLOODING.

THE PRESIDENT, IN RESPONDING TO THE THREAT, HAS REQUESTED AND THE CORPS IS PRESENTLY CONDUCTING A COMPREHENSIVE STUDY WHICH WILL RECOMMEND A PERMANENT SOLUTION TO THEIR FLOOD CONTROL PROBLEMS.

THE PLAN WILL BE SUBMITTED TO THE PRESIDENT BY NOVEMBER OF THIS YEAR. THERE IS UNCERTAINTY AS TO WHAT HAPPENS NEXT. WE ASSUME IT WILL BE SUBSEQUENTLY SUBMITTED TO THE CONGRESS AND COMMITTEE AS A REQUEST FOR AUTHORIZATION.

BUT THIS SCHEDULE COULD TAKE YEARS BEFORE A LONG-TERM STRATEGY IS AUTHORIZED AND PUT IN PLACE. AND THE COMMUNITIES WHO LIVE ALONG THE COWLITZ RIVER -- SUCH AS LONGVIEW-KELSO, CASTLE ROCK AND LEXINGTON -- CANNOT AFFORD TO WAIT THAT LONG.

MR. CHAIRMAN, RECENT ERUPTIONS OF MOUNT ST. HELENS INDICATE THAT THE MOUNTAIN IS TRULY NOT DORMANT, AND THAT AN EMERGENCY STILL EXISTS.

THE ASSISTANT SECRETARY OF ARMY, MR. GIANELLI, IN FACT, TESTIFIED BEFORE THE SENATE COMMITTEE ON APPROPRIATIONS AS TO THE "SERIES OF CRISES AT MOUNT ST. HELENS" THIS PAST YEAR, NAMELY:

- "THE THREAT OF CATASTOPHIC FLOODING ... DUE TO THE POTENTIAL UNCONTROLLED RELEASE OF WATERS FROM SPIRIT LAKE; AND

- The reduction in the level of flood protection afforded to the developed communities along the Cowlitz River ... as a result of sediment deposit in the Toutle and Cowlitz Rivers."

Mr. Chairman, at the present time, the communities at Longview-Kelso and Lexington have 100-year flood protection while at Castle Rock the current level of flood protection is about 10 years. But one storm event can change these numbers dramatically, so it is extremely critical that a margin of safety be consistently maintained.

We have, in the past, funded flood preventive work on the Cowlitz under the Corps' Emergencies Account. This has been difficult because OMB believes that Mount St. Helens no longer qualifies as an emergency. S.1028 would resolve the continuing emergency problem.

We, therefore, call upon your Committee in Senate bill 1028 to give the Corps authority to maintain 100-year flood protection in the Cowlitz River area while we wait for the Corps comprehensive study to be fully implemented.

Second: Legislation (S.1112) was introduced on April 20 to modify the Tacoma City Waterway project.

Mr. Chairman, the City Waterway project was established in 1905 as a major terminal. But, as time passed, City Waterway became unable to compete for shipping terminal development. And, as a result, its frontage was left to decay.

The City of Tacoma, in the mid-1970s, adopted a plan to redevelop the waterway for marina facilities. The plan reduced the useful width of the Federal project from 500 to 300 feet. So potential developers are now required to post a bond to insure removal of structures within the Federal channel should it ever become necessary.

The City of Tacoma feels that this bond requirement discourages potential developers and that legislation - such as S.1112 - to redefine the boundaries of the City Waterway project would encourage redevelopment efforts in the area.

We, therefore, request that your Committee report S.1112 as introduced. It has been cleared by the Board of Engineers for Rivers and Harbors. It has been approved by the Chief of Engineers. And it will simply change a line on a map.

THIRD: WE INTRODUCED SENATE BILL 1254 ON MAY 10 TO REDEFINE THE LIMITS OF THE ORIGINAL LEWISTON-CLARKSTON BRIDGE PROJECT.

THIS PROPOSAL WILL PERMIT THE U.S. ARMY CORPS OF ENGINEERS TO CONSTRUCT A 1,600-FOOT SEGMENT OF ROADWAY TO CONNECT THE BRIDGE WITH THE LOCAL STREET SYSTEM - AND ASSURE A MORE ORDERLY FLOW OF TRAFFIC IN CLARKSTON.

IT SHOULD BE NOTED THAT THE ADDITIONAL WORK CAN BE DONE WITH FUNDS ALREADY AUTHORIZED AND APPROPRIATED FOR THE PROJECT.

WE, THEREFORE, ASK THAT YOUR COMMITTEE REPORT SENATE BILL 1254 AND BRING THIS PROJECT TO A SUCCESSFUL CONCLUSION.

WITH US TODAY IS BILL PARIS, WHO IS A PERSONAL REPRESENTATIVE FOR GOVERNOR SPELLMAN, AND VAN YOUNGQUIST, WHO IS CHAIRMAN OF THE BOARD OF COUNTY COMMISSIONERS FOR COWLITZ COUNTY. THEY WILL SPEAK TO THE NEEDS OF COWLITZ COUNTY.

THANK YOU.

Senator JACKSON. Mr. Chairman, first we want to thank you for introducing the Water Resources Development Act of 1983, S. 947. That legislation includes the Blair and Sitkum waterways project at a cost of $30 million, the new Bonneville project on the Columbia River, $177 million; the South Aberdeen flood control project, $19.3 million; and the Yakima Union Gap flood control project at a Federal cost of $8.6 million; McNari Second Powerhouse Hydro Power Development at a Federal cost of $600 million.

Senator Gorton and I introduced S. 1028. This bill gives the corps interim authority to maintain a 100 year flood protection in the Cowlitz River area while we await for the corps comprehensive study of the problem to be fully implemented.

This, Mr. Chairman, all relates to Mount St. Helens which involves some unique situations as you know. And Mr. Van Youngquist is from the county where all of the problem exists. I think it would be well if we could start out hearing from him and then the representative of the Governor.

Senator ABDNOR. Thank you Senator Jackson.

Let me say at the outset that I looked at the problems you have. I was out there shortly after the eruption. I can well appreciate what you are fighting.

Mr. Youngquist, would you go first?

STATEMENT OF VAN YOUNGQUIST, COMMISSIONER, COWLITZ COUNTY, WASH.

Mr. YOUNGQUIST. Thank you, Mr. Chairman.

At exactly 11:32 this morning eastern daylight time we will observe the third anniversary of the eruption of Mount St. Helens.

Senator JACKSON. We postponed the hearing just for that.

Mr. YOUNGQUIST. For those of us in Cowlitz County the actual eruption on that day was a serious matter. But what has come afterwards has been even more serious. The problems that we are today facing are greater in magnitude than the actual eruption of 1980. We urge your support for Senate bill 1082 because we believe that there is a need to have interim authorization to allow funding until a permanent solution is implemented. I am speaking now about the potential for flooding in our area.

It is necessary to have this interim authorization to protect the life and property of 80,000 citizens in Cowlitz County. We need to eliminate the emergency response action that has been so far carried out and under Public Law 99 funds. The administration is telling us that we don't have an emergency, that over 3 years an emergency cannot exist. If that is the case we think we have an emergency but if it is the case that it is not defined as an emergency then interim authorization to really deal with the problem should be implemented and granted.

We have an exposure of $900 million of Federal flood insurance in our county. With all of this amount, policies are at risk because of the fact that we have had only minimal action insofar as dredging the Toutle and Cowlitz Rivers in the last 3 years. A bill of this type would allow the Corps of Engineers to identify and carry out interim actions which are comparable and compatible with their long-term solution that is due to come November 15, 1983.

I must say that all intensive emergency measures that have been used to date have been used up. There aren't any more emergency measures that can be taken. These emergency measures that have been used in the past are not cost effective because they do not lend themselves to be compatible with a permanent solution. We have at our best forecasts at least two to three more flooding seasons to go through before a long-term solution is in place.

I would like to just briefly say what the county itself has done to help itself. Under the direction of the national hazard mitigation task force, we have completed a watershed management plan that talks about the long-term solutions to the problem and interim actions. This is the document that has been prepared by over 100 individuals, nine Federal agencies, all of the State and county agencies that have been involved in the disaster. What we have in this document is actually a reconnaissance level study. We do offer solutions and we think they are compatible with the Corps of Engineers' thinking. In addition we are talking about interim time actions that should be taken until the corps can implement a permanent solution.

The problem is how do you control millions of cubic yards of material that is coming out of the 3 million yards of debris, avalanche material, that is next to Spirit Lake that will continue to erode into our river system for the next 15 to 20 years? How do we maintain the flood protection for the 35,000 to 50,000 people that live in the flood plain? The county has provided sponsorship of the lands' easements, rights of way and utility relocation that was required under corps' policy. All of the diking districts are currently bonded up to their maximum capacity.

They have no more room in which to seek additional funding. I guess it boils down to where do we go from here? We view it as a regional problem, not a problem confined only to Cowlitz County or the State of Washington. But the impacts on the States of Oregon, Idaho, and Montana who all use the shipping channel of the Columbia River and the Upper Snake River for the transportation of grain and other products which is in complete jeopardy as a result of fill into these navigation streams.

The people of our county have been subjected to stress and frustration as a result of a problem that is occurring on Federal land. We feel any permanent solution will emphasize upstream removal and retention of the material and this we agree with. This can be done at a cost that is much less than attempting to dredge in the Cowlitz River. This is a unique disaster, one that will continue for years. It didn't stop the day after the eruption stopped.

It will continue on as it has for the last 3 years for maybe 15 or 20 years in the future. It can and it should not be treated as a regular type of emergency disaster. As Senator Jackson mentioned the Corps of Engineers' study is due the 15th of November due to be placed on the President's desk at that time. It is our understanding that it could take from 5 to 6 years to fund and implement this permanent solution. That is why we are supporting and asking for interim authorization to deal with this ongoing problem. We believe that the meter is running just like on a taxicab. And every yard of material that passes through the Toutle River and into the Cowlitz River raises the cost of Federal dollars in the future. We know that material can be removed and retained in the Toutle River for approximately $2 a yard.

Over the last 3 years millions of yards of that material have been allowed to pass into the Cowlitz River and you are going to be looking at a cost of $3 to $7 a cubic yard to remove that material. We feel that we must get away from the Band-Aid type of approach to the emergency situation that is still ongoing and that we need to move into an interim type of authorization.

Finally, I would like to relate to you several questions that have been asked by my own citizens, constituents that I represent. Why they ask are the people of our county, why is it necessary to continue to live under the constant threat of flooding 3 years after the eruption of Mount St. Helens? Why is it necessary to pay Federal flood insurance premiums when the threat or risk could be minimized by the Federal Government? Why is it necessary to live under duress for 3 years or for an additional 5, 10 or 15 years when the problem is located on Federal land in Skamania County and not even a part of Cowlitz County?

Mr. Chairman, we appreciate very much the opportunity to be here and testify. We would be more than happy to answer any questions if it would help out.

Senator **Abdnor**. Thank you, Mr. Youngquist.

First, Senator Gorton, do you have anything you want to add? We welcome you. I am sorry we had to start before your arrival. I explained you were tied up on a very important subject in the committee.

STATEMENT OF HON. SLADE GORTON, U.S. SENATOR FROM THE STATE OF WASHINGTON

Senator **Gorton**. Thank you, Mr. Chairman. I appreciate your allowing me a few moments to add to the presentation which has already been made.

Senator Jackson has, of course, already submitted, on behalf of himself and me, our general statement on three projects. Before I go into those I should like to thank you for your very thoughtful consideration of the needs of our State in the water projects bill which is before you. It represents something of vital importance to our economy and to our economic development and your help is greatly appreciated.

The situation in connection with the Cowlitz and Toutle Rivers has already been discussed thoroughly by the county commissioner and by many colleagues. I simply want to add—because I was a member of your subcommittee during the course of the last 2 years—to your own understanding of the problem which plagued us during that entire period of time.

The eruption of Mount St. Helens was something which is unique in history. The results of such an eruption aren't covered in the normal emergency statutory scheme. The Corps of Engineers, while it has done a magnificent job in the area of the Toutle and Cowlitz Rivers and around Mount St. Helens, has been extremely troubled by the statutory authorization to continue that work because of the nature of the eruption and the continued problems caused by Mount St. Helens.

You have helped me and Senator Jackson on a couple of occasions to add special appropriations or special languages in appropriations acts to see to it that this work could go on. Obviously it is far better if we do that through the normal authorization process and that, of course, is what we are asking you to do, to authorize this work until such time as the Corps of Engineers and the President come up with a permanent solution which will lead to, we hope, a permanent and long-term authorization.

The need has been described to you graphically already. I don't need to add to it. But the legal need is one which we need to meet right now to see to it that the work can be done in its most efficient fashion. The other two proposals which Senator Jackson and I have presented to you are much more routine. The city of Tacoma would like a redefinition of its waterways because that will help immensely in the development of a relatively depressed part of the old water project, a part no longer needed for major navigation or major shipping areas.

His proposal is something which the committee very strongly supports and is not controversial, but involves a community asking for no money, simply changing lines on the map. In connection with the bridge at Lewiston, Idaho, and Clarkston, Wash., we simply want, with money which has already been authorized and appropriated, to allow for approaches to that bridge which appropriately connect it to Clarkston and ultimately with U.S. Highway 12.

Those two are very, very small bills. The Cowlitz River bill is of course very important to the lives and property of many thousands of people who thank you for your efforts and for your sympathy and your hearing.

Senator **Abdnor**. Thank you, Senator Gorton. We appreciate your kind words. I would say that we miss you on this committee. You had great interest.

Just let me ask you, Mr. Youngquist. You said the corps is putting forth a plan which will be completed some time in the fall . How does your proposal relate to their's? Will it fit in quite well?

Mr. **Youngquist**. It ties in directly. The interim actions that we are recommending are ones that will tie in with their permanent solution. So it is cost effective to begin to implement those things that they know that they are going to have to be doing in the future. It ties in directly. It is very compatible with their approach to the problem.

Senator **Abdnor**. That is all we need to really know. Does anybody want to add to anything?

Mr. Paris, you came all the way from Washington, representing the Governor. We welcome you.

STATEMENT OF WILLIAM PARIS, REPRESENTING HON. JOHN SPELLMAN, GOVERNOR, STATE OF WASHINGTON

Mr. **Paris**. Thank you, Mr. Chairman.

I am William Paris, Governor Spellman's personal representative in southwest Washington.

I want to express my gratitude for this opportunity. The State of Washington is understandably most sensitive to the ongoing Mount

St. Helens problems and I am here to support the legislation by Senators Gorton and Jackson, and also the county's request for interim authorization. Governor Spellman requested and the legislature provided $1 million for dredge spoil sites acquisition last year. This year the Governor requested and the legislature unanimously approved $5.2 million for spoil site acquisition and sponsorship.

I might say that in order to do this it was necessary to raise the debt limit of the State in terms of the bonding capacity. We are doing all we can to cooperate with the Federal family as we address this regional problem. Governor Spellman is hopeful that you and your committee will recognize the magnitude of this State-county commitment during these extremely difficult fiscal times. We are indeed endeavoring to shoulder our responsibility and responding to the continuing deteriorating conditions and catastrohpic threat precipitated by the problem located on Federal land.

If there are any questions I might just say that we have with us Mr. Randy Sweet who is the geologic consultant for Cowlitz County. Thank you.

Senator **Abdnor**. Thank you, Mr. Paris.

Senator **Gorton**. Mr. Chairman, I would like to say something I should have said before when Mr. Paris was introduced. Mr. Paris comes to you as a representative of Governor Spellman in this connection. I would like you to know that he also comes as one of my closest friends and one of the people whom I most admire in the State. Mr. Paris comes from Longview, Wash. He is the minister of a magnificent, wonderful, and inspiring church there. He was also, during much of the time in which I served as an Attorney General State representative in Olympia, who understands both the governmental and the political process very, very well.

He is a magnificent representative for the Governor in his part of the State and an extremely fine person. I specially commend his testimony to you.

Senator **Abdnor**. Thank you. I appreciate that. It is pretty obvious the gentleman knows what he talks about. But it is a fine recommendation.

Gentlemen, we welcome this. Mr. Sweet, did you have anything you wanted to add to this?

Mr. **Sweet**. No. I am simply here to answer questions on the technical aspects.

Senator **Abdnor**. We are satisfied with your background. It dovetails very well with the proposal.

Mr. **Sweet**. Yes. I think the only thing that is being considered in the corps plan that we did not consider is complete buy out and move out essentially all of Cowlitz County. We didn't feel that was appropriate from the local level.

Senator **Abdnor**. Gentlemen, I think we have an understanding. Senator Gorton has certainly let us know about the problem. Some of us have seen it. You have come a long way to tell us about it. We do appreciate it and we hope we can give this matter attention in the near future.

Thank you all for coming.

Senator **Jackson**. Thank you, Mr. Chairman.

[Letters from the Governor of the State of Washington and the Cowlitz County Commissioners and bills S. 1028 and 1112 follow:]

State of Washington

JOHN SPELLMAN, Governor

OFFICE OF THE GOVERNOR

May 13, 1983

The Honorable James Abnor, Chairman
Subcommittee on Water Resources
Committee on Environment and
Public Works
United States Senate
Room 10, Dirksen Senate
Office Building
Washington, D.C. 20510

Dear Senator Abnor:

I understand that the Water Resources Subcommittee is currently taking testimony as part of its evaluation of the numerous water-resources projects that are being considered for authorization and funding in FY 1984.

I write to set forth the state of Washington's position as part of that testimony. As you know, a most unpredictable and life-threatening potential flooding situation exists in the Toutle and Cowlitz Rivers below Spirit Lake and Mt. St. Helens in southwestern Washington. The state of Washington, together with various Federal agencies, has cooperated with Cowlitz County in the development of a "Watershed Management Plan." That reconnaissance study has identified potential long-term solutions as well as necessary interim actions that require funds from the FY 1984 Federal budget. Taking those interim actions is essential during the time in which the Corps of Engineers is completing its presidentially directed "Comprehensive Plan," due in November, 1983; that plan will recommend a general and permanent solution and indicate funding for its long-term implementation.

Those interim actions are not only necessary but urgent. Channel conditions related to flooding and erosion have significantly deteriorated since termination of "disaster response" work in the Fall of 1981. The sedimentary deposits since that time have resulted in a net increase of 18 million cubic yards of sediment in the Cowlitz River. That, in turn, has caused periodic reductions in the level of flood protection to well below the 100-year equivalency in all leveed areas. Temporary emergency levee elevations and recent scour, that is, dissipation of sediment, in the Lower Cowlitz River have alleviated those reductions, but the leveed area of Castle Rock on the Upper Cowlitz River still enjoys only 10-year protection.

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It is true that, since the termination of dredging in October, 1981, the Toutle-Cowlitz River system has not experienced a flood event greater than the four- to seven-year equivalency. Our relatively mild recent winters have kept erosion at a minimum. Yet in the decade prior to the eruption, we had three floods approaching or exceeding the 100-year equivalent. The message is clear: we have been very lucky during this post-eruptive period; but how long will that luck continue?

Regarding the funding for the interim actions that our "Watershed Management Plan" indicates are necessary before the completion of the Corps of Engineer's "Comprehensive Plan" next fall, as you know, I requested and the Washington State Legislature unanimously adopted a bill to provide $5.02 million for state/local match for acquisition and sponsorship of dredge-spoils sites as well as other necessary actions. In our state's difficult fiscal situation, that measure emphasizes our concern, our commitment, and our bi-partisan support for the interim work that we must have in order to protect life and property. It is now essential that the Federal government provide funds for its part in completing those necessary actions that the Watershed Management Plan specifies.

With thanks for your consideration, and with best wishes,

Sincerely,

John Spellman

John Spellman
Governor

Cowlitz County

BOARD OF COUNTY COMMISSIONERS
WALTER CHURCH JR. DISTRICT NO. 1
BERYL ROBISON DISTRICT NO. 2
VAN A. YOUNGQUIST DISTRICT NO. 3

May 13, 1983

United States Senate
Environment and Public Works Committee
Water Resources Subcommittee
Washington, D.C.

Dear Chairman and Members:

As Chairman of the Cowlitz County Commission, I would like to thank you for the opportunity to appear here before you. The testimony I am presenting is based upon findings and recommendations in our "Toutle-Cowlitz Watershed Management Plan" which was developed over the past eighteen months and adopted by the Cowlitz County Commissioners. The "Plan" development was managed by Cowlitz County at the direction of the National Hazard Mitigation Task Force. More than 100 scientists, engineers, technicians and elected officials representing Federal, State and local agencies and interests directly participated in this planning process.

Our "Plan" identifies potential long-term solutions, but I am here to emphasize the need for immediate interim actions, prior to the 1983-84 flood season, while more detailed studies are completed.

Dredging 6 million cubic yards from the Upper Cowlitz River is the minimum interim action necessary to provide flood protection. However, it must be emphasized that the "Plan" calls for upstream sediment control to the fullest extent possible in the Toutle River. Any prudent long-term solution must also emphasize upstream removal. Control/removal of 17 million cubic yards in the Toutle River is compatible with such a long-term solution and can be achieved at one-third the cost of future Cowlitz River dredging. Similarly, banks and bridges attacked by the braided and meandering rivers must be controlled through rip-rapping and other measures at a projected 1983-84 cost of $1 million. The total projected budget for sediment control/removal work includes:

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1983 AUTHORIZATION AND FUNDING REQUIREMENTS

COUNTY/STATE	TOTAL	$ 5.02 Million
Spoils Site Acquisition/Sponsorship..	5.02	
FEDERAL	TOTAL	$48.1 Million
Sediment Removal		
Cowlitz River (6 mcy)............	21.0	
Toutle River (17 mcy)............	25.5	
Bank Protection and Levees...........	1.0	
Warning System Maintenance...........	0.6	

Channel conditions related to flooding and erosion have significantly deteriorated since termination of "disaster response" work in the Fall of 1981. Deposition resulting in a net infilling of 18 million cubic yards in the Cowlitz River has been measured. This has resulted in periodic reductions in the level of flood protection to well below the 100-year equivalency in all leveed areas. Temporary emergency levee raises and recent scour in the Lower Cowlitz River have increased protection but the leveed area of Castle Rock on the Upper Cowlitz River currently has only 10-year protection. The raised riverbed has also resulted in backwater flooding near Castle Rock as well as accelerated bank, road, and bridge abutment erosion at many locations.

Many areas are at much greater risk now than at any time since October 1981. The citizens and property currently threatened within the Cowlitz Valley include:

MAY 1983 FLOOD THREATENED AREAS

	Approximate Population	Dwelling Units	Commercial/ Industrial	Value ($ Mil.)
Castle Rock (1)	1,590	600	70	30
Lexington	1,760	600	10	40
Kelso	5,040	2,000	180	166
Longview	22,410	9,000	660	2,344
Rural (2)	530	200		11
TOTAL	31,330	12,400	920	2,355

(1) Castle Rock currently has 10-year protection.

(2) Castle Rock High School as well as major subdivisions are threatened by backwater flooding due to the raised Cowlitz River bed.

Within the Toutle Valley, hundreds of acres of previously productive agricultural and timber lands as well a 1980-81 spoils sites have been eroded. Direct property losses and aggravation of the Cowlitz River infilling continue due to this uncontrolled river meandering and lack of bank protection.

Currently, Federal flood insurance in Cowlitz County is approximately $900 million. With County unemployment at 20 percent, this amount of insurance coverage emphasizes the level of local concern. Flood insurance rates are going up and it is becoming increasingly difficult for the public to maintain this essential insurance coverage.

Since October 1981, sediment control/removal work necessary for flood protection has been limited to the removal of 3 million cubic yards from the Lower Toutle River during December 1982 through April 1983. That contract is completed and no work is on-going. Temporary emergency levee improvements were carried out in Kelso, Longview, Lexington, and Castle Rock about six months ago. No further temporary levee raises are possible. Local emergency protection actions are becoming increasingly necessary and more frequent as meandering of the Cowlitz River directly attacks banks, road beds, and bridge abutments.

Updated river conditions and related costs and damages projections emphasize the need for interim authorization and funding until implementation of a long-term solution. A summary of costs and damages under current protection levels includes:

MAY 1983 UP-DATED POTENTIAL FLOOD LOSSES ($ MILLIONS)

	PROBABILISTIC Average Annual Losses			ACTUAL Losses If Flooding Occurs
	83-84	84-85	85-86	
Property Damage	13	13	13	2,675
Lost Income	--	--	--	9
Transportation Losses	25	25	25	250
Emergency Public Expenditures	--	--	--	2
Emergency Dredging	14	14	14	50
TOTAL	52	52+*	52++*	2,986

* These figures reflect no deterioration in conditions or maintaining the status quo.

Note: Projections updated from current stage/frequency and Watershed Management Plan stage/damage data.

If the actions proposed for 1983-84 sediment control/removal are undertaken, their benefits will extend through the 1985-86 example illustrated above. If no action is taken, the level of protection will deteriorate annually and probabilistic losses will substantially exceed those shown for 1984 through 1986.

Whenever major flooding occurs, the "Actual" losses shown in the table will be experienced. If the level of protection is allowed to fall through continued lack of action or due to a major storm event, the probability of experiencing heavy damage becomes much greater. In other words, the "Probabilistic" damages amount will approach the "Actual" damages amount.

Since the termination of dredging in October 1981, the Toutle-Cowlitz River system has not experienced a flood event greater than the 4- to 7-year equivalency. These relatively mild winters have served to integrate the drainage on the debris avalanche and perhaps "prime" the system for major sediment movement. In the decade prior to the eruption, we had three floods approaching or exceeding the 100-year equivalent. The message is clear, we have been very lucky during this post-eruptive period, but how long will that luck continue? Isn't it better to protect people and property in advance than to pay later on the $900 million of Federal Flood insurance?

We will greatly appreciate any assistance you can provide to help us address this situation.

Respectfully,

Van A. Youngquist

Van Youngquist
Chairman Board of County Commissioners
Cowlitz County, Washington

VY/km

II

98TH CONGRESS
1ST SESSION

S. 1028

To modify the navigation project on the Cowlitz River, Washington, to authorize the Secretary of the Army to implement interim measures to control floods in the lower Cowlitz River area and improve navigation on the Columbia River.

IN THE SENATE OF THE UNITED STATES

APRIL 12, 1983

Mr. GORTON (for himself and Mr. JACKSON) introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works

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A BILL

To modify the navigation project on the Cowlitz River, Washington, to authorize the Secretary of the Army to implement interim measures to control floods in the lower Cowlitz River area and improve navigation on the Columbia River.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That to assure adequate flood protection for developed areas in the vicinity of the Cowlitz and Toutle Rivers, Washington, and to improve navigation in the Columbia River, the navigation project on the Cowlitz River, Washington, authorized by the first section of the Act entitled "An Act making appropriations for the construction, repair, and preservation of certain public works on rivers and harbors, and for other purposes", approved June 25, 1910 (36 Stat. 665), is hereby modified to authorize the Secretary of the Army, acting through the Chief of Engineers, to implement and maintain flood control measures on the Cowlitz and Toutle Rivers by dredging or other means determined by the Secretary to be necessary to assure flood protection for developed areas in the vicinity of such rivers against a one-hundred-year flood on the lower Cowlitz River and to reduce sedimentation flow and the chance of blockage on the Columbia River.

SEC. 2. The authorization provided in the first section of this Act shall remain in effect until such time as permanent solutions and measures for flood control and navigation as identified in the Chief of Engineers' Cowlitz and Toutle Rivers final feasibility report, to be submitted to the President and the Congress by the Secretary of the Army, are fully implemented.

II

98TH CONGRESS
1ST SESSION

S. 1112

To modify the city waterway navigation channel project, Tacoma Harbor, Washington, to redefine the project boundaries.

IN THE SENATE OF THE UNITED STATES

APRIL 20 (legislative day, APRIL 18), 1983

Mr. GORTON (for himself and Mr. JACKSON) introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works

---

A BILL

To modify the city waterway navigation channel project, Tacoma Harbor, Washington, to redefine the project boundaries.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the city waterway navigation channel project, Tacoma Harbor, Washington, authorized by the first section of the River and Harbor Act of June 13, 1902 (32 Stat. 347), is hereby modified to direct the Secretary of the Army, acting through the Chief of Engineers, to redefine the boundaries of such project in accordance with the recommendations contained in appendix B of the feasibility report of the Seattle District Engineer, dated November 1981.

MAUMEE BAY STATE PARK, OHIO

Senator **Abdnor**. Congresswoman Kaptur is here. We certainly welcome you to the committee. It has been a long time since I was a resident over there. I enjoyed it very much. We do welcome you. Why don't you go right ahead.

STATEMENT OF HON. MARCY KAPTUR, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF OHIO

Ms. **Kaptur**. Mr. Chairman, I appreciate the opportunity to be here this morning and to testify on behalf of S. 1162, a bill to authorize the Secretary of the Army to construct a project to provide shoreline protection for Maumee Bay State Park in northwest Ohio. The bill has been introduced by Senators Glenn and Metzenbaum. I have also introduced companion legislation in the House where it has the strong bipartisan support of the Ohio congressional delegation. Furthermore, this project is one of the top natural resource priorities for the State of Ohio.

Maumee Bay State Park is a multiuse facility located in Lucas County, Ohio, on the south shore of Lake Erie near Toledo. The shoreline is eroding at the rate of 12 feet each year. The shoreline protection project is essential to halt this disintegration of the shoreline and to allow the State of Ohio to proceed with its multimillion dollar capital investment in the development of the park and related facilities. The authorization of this legislation will have a direct positive impact in the vital areas of environmental protection, jobs creation, and expanded recreation.

The estimated cost of the shoreline project is $10,396,000 with the State of Ohio providing approximately a third of that amount. To date, the State has already invested in excess of $2 million in the development project. For 14 years, Mr. Barney Quilter, the respected speaker pro tem of the Ohio House of Representatives, has sheperded this project step by step. Ohio has made a firm commitment to meet the non-Federal requirements for the shoreline protection project. In addition to its contribution to the shoreline project, the State has expressed its intent to complete the overall development of Maumee Bay State Park currently estimated at $36 million.

Beyond the obvious environmental value of this legislation, there is its added component of being job creative in a region suffering from high unemployment.

During the span of the park's construction, 2,000 new jobs are expected to be generated. In addition, permanent jobs will be created in the park and in related industries. The permanent jobs that will result can be filled by area residents lacking specific job skills. Furthermore, the overall park investment is expected to generate $3 per visitor. With an estimated one million visitors per year, this would yield $3 million in new annual revenues for the Toledo area.

The park will also serve to attract industry and to provide for a new Toledo convention trade. The park, the only major State park in northwest Ohio and the only one in close proximity to a major metropolitan area, will directly serve five congressional districts.

I believe that the authorization of this project which not only protects the shoreline of Lake Erie, a valuable natural resource, but also provides a variety of economic benefits to Ohio's northwest, merits your support. I urge the committee, Mr. Chairman, to act favorably on this legislation and will appreciate your assistance.

I might mention in terms of the Army Corps of Engineers the project has been cleared at the district level and is now up at the regional level.

Senator **Abdnor**. In other words, it is signing off on it? That is actually finished?

Ms. **Kaptur**. Yes. It has been up now to the next level. So I also want to extent to you my deep appreciation for allowing me the courtesy to appear before you this morning.

Senator **Abdnor**. Thank you. We are happy to have your statement and will be waiting I guess for words from the Corps as to when they finish this.

You do have it in the House?

Ms. **Kaptur**. Yes. It is moving along there.

Senator **Abdnor**. Thank you very, very much.

Ms. **Kaptur**. Thank you, Mr. Chairman.

[The bill, S. 1162, follows:]

II

98TH CONGRESS
1ST SESSION

S. 1162

To authorize the Secretary of the Army to construct a project to provide shoreline protection for Maumee Bay State Park, Ohio.

IN THE SENATE OF THE UNITED STATES

APRIL 27 (legislative day, APRIL 26), 1983

Mr. GLENN (for himself and Mr. METZENBAUM) introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works

---

A BILL

To authorize the Secretary of the Army to construct a project to provide shoreline protection for Maumee Bay State Park, Ohio.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That to halt shoreline erosion in Maumee Bay State Park, Ohio, and to allow development of the park to its full potential, the Secetary of the Army, acting through the Chief of Engineers, is authorized to construct a project for shoreline protection for the southeast shore of Maumee Bay, Lake Erie, Ohio, from Cedar Point National Wildlife Refuge to West Bay Shore Road, Oregon, Ohio, substantially in accordance with the recommendations of the District Engineer, at a cost currently estimated at $10,396,000. The non-Federal share of the cost of such project is currently estimated at $3,095,000.

MILTON, PA.

Senator Abdnor. I see Senator Specter has now joined us. Senator, we welcome you.

STATEMENT OF HON. ARLEN SPECTER, U.S. SENATOR FROM THE STATE OF PENNSYLVANIA

Senator Specter. Thank you very much, Mr. Chairman.

Senator Abdnor. We are happy to hear from you. You proceed in your own fashion.

Senator Specter. I very much appreciate the opportunity to appear before you, Mr. Chairman.

I am here today to testify before the Senate Environment and Public Works Subcommittee on Water Resources in connection with a project for Milton, Pa. I certainly commend the distinguished chairman of this subcommittee for scheduling hearings on these important water resources projects. Today's discussion will help outline these water projects which deserve immediate attention and eventual authorization.

While I have already introduced legislation to authorize several flood control programs located in Pennsylvania during this Congress, I urge the subcommittee today to focus its attention on S. 674, a bill to authorize implementation of a project for flood damage prevention at Milton.

The need for this important flood control project has been thoroughly demonstrated by history. The Borough of Milton has been subject to periodic devastation by floods from the West Branch of the Susquehanna River. Over the past 40 years, the borough has experienced six major floods: 1936, 1946, 1951, 1964, 1972, and 1975.

Tropical Storm Agnes in 1972 caused the greatest amount of hardship, inflicting almost $40 million in flood damages. During the June 1972 flood, the depth of floodwater in parts of the borough was as much as 15 feet, and between 4 and 8 feet through the central business district.

According to the Army Corps of Engineers, approximately one-third of the borough was inundated during the flood, with about 800 homes, 120 commercial establishments, and 13 industries incurring flood damage. Almost the entire population of Milton was directly or indirectly affected by the flood.

Without this badly needed flood control project, Milton will continue to exist under the threat of severe destruction from future storms. The heavy development in the flood plain area and the adverse physical flow conditions at Milton have made it very susceptible to flood damage. Milton's river channel is constricted by several large islands, the Route 642 highway bridge, and a railroad bridge and embankment.

Furthermore, the flood problem is heightened by the existence of Limestone Run, a small stream with a 15-square-mile drainage area which flows through the center of the borough. Flood flows on the West Branch back up Limestone Run and flood the low-lying flood plain.

Citizens of Milton have alerted me to another problem that is caused by the flooding: Stream-bank erosion of the east bank of the West Branch. The east bank of the river averages from 20 to 30 feet high in areas of Milton and has eroded to the point where several buildings along Front Street are being endangered.

Mr. Chairman, various flood control plans for Milton have been examined by the Corps of Engineers. The best approach, according to the corps, however, is a series of levees and flood walls which are designed to confine flood flows to a designated channel or floodway. This flood control method has been proven for providing a high degree of protection around concentrated urban areas, such as Milton.

Having suffered through six severe floods and the ravages of tropical storm Agnes, Milton needs substantive protection to prevent the possibility of future destruction. My sense is that now is an opportune time to proceed on this important public works program, given current economic conditions and the need for infrastructure improvements.

It is estimated that the Milton project will cost $87 million. While this is a considerable amount of money, I believe it is a necessary expenditure that will protect property and prevent the recurrence of previous devastation. That the Army Corps of Engineers has not recommended construction for Milton does not convince me that inaction is appropriate.

We have already witnessed severe damages reflecting present conditions and potential for further destruction. The possibility of future destruction from flooding and the capability of providing valuable jobs to this region make the Milton flood control project important to central Pennsylvania.

I thank the committee for this opportunity to testify and urge my colleagues in the Senate to promptly enact legislation to authorize a flood control project for Milton, Pa.

I would just add in conclusion that while this Milton project will cost an estimated $87 million, that I would submit to this subcommittee that it is a very worthwhile expense being incurred because of the much larger expense which has been inflicted on this community so many times in the past.

It is my judgment that this is especially a good time to proceed because we are searching for these projects and ways to stimulate the economy at a time when there is an independent interest in providing jobs and job opportunities. This is not a make-way for a makework project but one which is really vitally necessary.

Too often, Federal Government responds only after the natural disaster occurs, whether it be flood, tornado, or hurricane. At that time in the wake of great obvious pain and suffering, there is some governmental response. It is my sense that we ought to act in a preventive way anticipating the problems, when it is much cheaper to prevent it than it is to respond after the fact.

Therefore, I very much urge the committee's attention to this problem at this juncture.

Senator **Abdnor**. Thanks, Arlen. I am sure that the cause is there and the need.

Where do we stand on this with the corps? Are they working on it now? Are they completing the study?

Senator **Specter**. Yes, they are, Mr. Chairman. I have given them a push. I don't think they need a push. They are very attentive. But I have talked to representatives of the corps and I am scheduled to sit down and talk to the general in charge.

The entire area of central Pennsylvania is in urgent need with projects really being necessary in Wilkes-Barre, Lock Haven, and in Harrisburg, areas which have suffered enormous flood damage in the past. There are some preliminary plans. There are some plans to start, some expenditures in the Wilkes-Barre area and I am confident that the Corps of Engineers will give this matter appropriate attention.

Senator **ABDNOR**. I am sure they will, too. You gave your usual and very excellent statement. We appreciate your taking the time. I know you are busy. We will be waiting to hear from the corps.

Senator **SPECTER**. I would like to have been here earlier, Mr. Chairman; I had to stop on the floor very briefly coming over. The Amtrak was somewhat late. We had a rather exciting time in Philadelphia last night. We had a three-way contest on the Republican side, which is unheard of. We had a very interesting race on the Democratic side, where the polls showed that Mr. Goode was likely to win by a wide margin. It was past midnight when the returns moved from the 84- to the 88-percent return level that Mr. Goode overtook Mr. Rizzo. So it was a hot time in the old town.

Senator **ABDNOR**. I am sure it was.

Thank you very, very much.

[A letter from Senator Heinz and the bill, S. 674, follow:]

John Heinz
Pennsylvania

United States Senate

Washington, D.C. 20510

Committees:
Aging
Finance
Banking, Housing and Urban Affairs
Energy and Natural Resources

May 9, 1983

The Honorable James Abdnor
Chairman
Subcommittee on Water Resources
Committee on Environment and
 Public Works
Washington, D.C. 20510

Dear Jim:

Thank you for providing me with notification of your Subcommittee hearings on May 17th when you will be reviewing water project authorizations for non-controversial projects.

Of course, I fully support the effort of my colleague from Pennsylvania to enact an authorization for flood control measures at Milton, Pennsylvania. However, I do not wish to take up the Subcommittee's time when you will be considering so many project authorizations.

I would like to applaud you for your concerted effort to get a water project authorization bill to the floor this year. Frankly, seven years is a long time to neglect our water resources, especially our inland waterways. In commending your leadership in this area, I would also like to suggest that you consider including the water projects authorized by the Senate Coal Caucus bill, S. 1171, which was cosponsored by twenty Senators. As Chairman of the Coal Caucus, and in conjunction with Senator Wendell Ford, Vice-Chairman, I have drafted a bill designed to address the most urgent of our outstanding navigation projects.

Again, I appreciate the invitation to testify.

Sincerely,

John Heinz
United States Senator

JH/rbk

II

98TH CONGRESS
1ST SESSION

S. 674

To authorize implementation of a project for flood damage prevention at Milton, Pennsylvania.

IN THE SENATE OF THE UNITED STATES

MARCH 3 (legislative day, FEBRUARY 23), 1983

Mr. SPECTER introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works

---

A BILL

To authorize implementation of a project for flood damage prevention at Milton, Pennsylvania.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of the Army, acting through the Chief of Engineers, is authorized to implement a project for flood damage prevention at Milton, Northumberland County, Pennsylvania, on the west branch of the Susquehanna River, substantially in accordance with the report of the Corps of Engineers entitled "Local Flood Protection Study at Milton, Pennsylvania" dated July 13, 1977, at an estimated cost of $87,000,000.

SEC. 2. There are authorized to be appropriated such sums as may be necessary to carry out the provisions of this Act.

CROSS FLORIDA BARGE CANAL

Senator **Abdnor**. We have a number of Congressmen and others from Florida up next. Could I ask you people to come forward.

STATEMENT OF HON. CHARLES E. BENNETT, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF FLORIDA

Mr. **Bennett**. Yes, sir. Thank you very much for letting me be with you. There are a fair number of people from Florida here.

Senator **Abdnor**. You bring forth whomever you wish.

Mr. **Bennett**. I would appreciate any of them coming up. I would like, in view of trying to keep my record going over there in the House, if I could, to testify first. I would appreciate it.

Senator **Abdnor**. You go right ahead.

Mr. **Bennett**. Sir, first of all I want to thank the committee very much for allowing me to be here. This is important to me. This project, Cross Florida Barge Canal, is vigorously supported in my district for its economic benefits and I support it vigorously.

The Corps of Engineers has been authorized by the last Congress to undertake an updated benefit-cost study for the canal. I believe that it would be wasteful and capricious for the Federal Government to terminate, without having the current facts, a project which is almost one-third complete and on which more than $90 million in Federal and State funds have been invested.

The Corps of Engineers, following their 1977 study could have asked for construction funds on the basis of their study, although they stated that the benefit-cost ratio was then marginal. In addition, they did not find it to be environmentally objectionable. Unfortunately, they declined to ask for funding under these circumstances and in view of the negative feeling on the part of the Florida cabinet; even though the canal was originated at the request of the State-by-State law which has never been repealed.

This new study, which is in the planning process, would report on the current costs to complete the canal and the current benefits which would be derived from it. This study was authorized by Congress last August to update and expand the 1977 economic analysis of the Cross Florida Barge Canal project. The 1977 study did not include several important factors, including new benefits which can now be foreseen, such as the use of coal by local powerplants resulting in savings in electric costs, and the positive effects of new jobs created by the canal.

The $450,000 approved by the Congress last year for the study was not to come from new Federal funding, but rather, the Corps of Engineers was directed to pay for the study from available funds. It seems only right and just that this study be completed. Deauthorization before that would be capricious and wasteful.

Another reason to not deauthorize by this legislation is to preserve ecological resources in the area of the Cross Florida Barge Canal. Florida Attorney General Jim Smith has advised me recently of lawsuits filed against the State by the original landowners who seek the return of their lands condemned by the State to build the canal and that their success would imperil environmental and recreational resources.

I believe that deauthorization would virtually guarantee the success of those lawsuits. Furthermore, I believe that a State or Federal law to use these lands for purposes other than the canal would be unconstitutional because the taking of land for a specified purpose cannot be the basis for using the land for other purposes.

There has been little notice of your hearing today. I just learned of it late last week. So, there is no body of witnesses here for the canal as there would have been with ample notice. Nevertheless, a leading Jacksonville businessman, whose business is affected by port operations, was recently quoted in the Florida Times-Union as saying, "If you want to double the economic impact of the Port of Jacksonville in short order, finish the Cross Florida Barge Canal." The interview went on to say that the businessman believed that with the current prices of commodities such as coal and grain which could easily be shipped through the canal, a new benefit-cost study would show that the new benefit-cost ratio would be about 3 to 1.

It is estimated that within 2 years of completion of the canal, the canal would bring about $1 billion annually to the local economy. This was reported in the Florida Times-Union by their business columnist who, once a strong opponent of the canal, has become convinced, as I always have been, that there is great merit in the canal proposal.

The Withlacoochee Regional Planning Council, representing five Florida counties which would be affected by the canal, passed a resolution on May 5, 1983, in opposition to deauthorization, stating that deauthorization may have an "adverse effect on Lake Oklawaha and flood control in Marion County."

This comes despite the fact that the Florida Congressman who represents most of these counties has introduced his own bill to immediately deauthorize the canal. I submit for the record the resolutions of both the planning council and the Marion County Board of County Commissioners.

Senator **ABDNOR**. It will be made a part of the record. (See p. 268.)

In addition, the president of the Jacksonville City Council has just sent me a strong letter of support for the canal project noting, and I quote: "The Council has consistently and actively supported the Barge Canal ever since funds were illegally frozen by a previous administration."

He included copies of two council resolutions passed just last year strongly supporting the completion of the canal. They urged other counties through which the canal crosses to join with the city of Jacksonville in an association dedicated to completing the canal and appropriated funds for this purpose.

I submit for the record the resolutions of the council and the letter to me from its president, Henry Cook. (See p. 270.)

Mr. **BENNETT**. I strongly urge that this committee not allow deauthorization of the canal, certainly not before the new benefit-cost study can be completed and available for consideration.

I submit this at this time. Mr. Chairman, I am embarrassed to have to leave now. I have a 32-year record of not missing any votes in the House of Representatives and they are meeting. They could have another vote. So I am going to depart as much as I would like to stay.

Senator **Abdnor**. Thank you, Congressman.

Just let me say we appreciate your statement. I want you to know I realize there is a big story in every project, but we have in one bill alone, over 100 projects. It was about 2½ weeks ago that we announced the hearing.

Mr. **Bennett**. I am only grateful. It is just that I am sorry that I have to leave. This is the first time in my entire career that I have ever testified on the Senate side when the House is in session. I am possibly imperiled in casting a vote. So I must depart.

Senator **Abdnor**. I am a great admirer of you.

Thank you.

Mr. **Bennett**. God bless you.

Senator **Abdnor**. Our time is short today and we want to hear the testimony of Dr. Rivlin.

I am going to have to ask you all to summarize as best you can. Your statements will be made part of the record. I am sorry. It is either that or try to do it this afternoon, but I would like to keep on schedule with Dr. Rivlin.

Congressman, welcome. We appreciate your presence. We know of your interest.

Mr. **Chappell**. I would yield to Congressman MacKay who is an opponent of the bill.

Senator **Abdnor**. Congressman?

STATEMENT OF HON. BUDDY MacKAY, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF FLORIDA

Mr. **MacKay**. I appreciate the opportunity to be here.

I am expressing, on behalf of Senator Chiles, his regrets that he cannot be here, Mr. Chairman, because of his commitments today.

I will be very brief.

I have filed a written statement which contains with it a copy of the letter of the attorney general, Jim Smith. I believe he has contacted you directly, stating his support for the deauthorization of the canal. (See p. 254.)

My name is Buddy MacKay. I represent the Sixth Congressional District. The Cross Florida Barge Canal is complete except for that part which lies within the Sixth Congressional District which is my district.

I oppose the completion of the canal. Congressman Chappel is a person I admire very much. He and I have lived in the same towns for years. We disagree on this issue.

I want to make it clear it is not a personal matter. It is a disagreement. There is no question but what the Florida Barge Canal will not be completed. The issue is when to deauthorize it.

It has got to be one of the unique issues in public works in America today. The people who have been proponents of the canal are now asking that it not be deauthorized, although they are not asking that it be completed.

Congressman Bennett's position is different. He is from the Port of Jacksonville. The fact of the matter is, Jacksonville might benefit from the canal. The State of Florida we do not think would benefit. The Governor of the State of Florida supports deauthorization. The elected cabinet, all of whom are elected statewise support deauthorization.

The Legislature in Florida has already passed legislation saying, what will happen if the canal is deauthorized. The only remaining issue is, what would happen to Lake Ocklawaha, which has been completed as part of the canal project. This bill provides Ocklawaha would be included in the boundaries of the Ocklawaha National Forest, sets up a mechanism so that if the State decides to sell it, the Federal Government could acquire it.

We believe that the way out of the litigation now pending in Florida is to deauthorize the canal and let this mechanism which is already in place work.

The opponents, as you will hear, believe that that would somehow jeopardize the public lands. I hope, Mr. Chairman, that you and your staff will carefully consider Attorney General Smith's letter which was written for the precise purpose of trying to deal with this confusion.

Thank you, very much.

Senator **Abdnor**. Thank you, Congressman MacKay.

I am sorry you have to testify under these conditions. Your entire written statement and the attorney general's letters will all be made a part of the record.

The No. 1 issue around here today is budget. Senator Chiles is ranking member of that committee. He had to be there.

Thank you.

Congressman, it is great to have you back. I suppose you are getting in shape for that baseball game.

STATEMENT OF HON. WILLIAM V. CHAPPELL, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF FLORIDA

Mr. **Chappell**. We are trying to, Mr. Chairman.

Senator **Abdnor**. That is a genuine man in the Congress.

I will be quiet. You go right ahead.

Mr. **Chappell**. You are very kind, Mr. Chairman.

I want to say what a distinct pleasure it is for me to have the opportunity to appear before your committee, especially before you as chairman.

In your mission over in the House, you had a distinguished record and we know that you will follow that record in the Senate. We know the great things you do here.

I am going to summarize, Mr. Chairman.

You have before you a statement which I would like to have made a part of the record.

Senator **Abdnor**. It will be made a part of the record. (See p. 246.)

Mr. **Chappell**. I also offer a list of supporting data for the canal project which I would like to have made a part of the record.

Senator **Abdnor**. That, too, will be made a part of the record.

Mr. **Chappell**. Mr. Chairman, this canal, the Cross Florida Barge Canal, is the 150 wide, 12 feet deep, 110-mile missing link, in the 2,600-mile natural inland waterway system which extends from the gulf coast and the coal rich Western and Midwestern parts of the country to the Atlantic and Eastern seaboard, including the shortened route from the Midwest via the Tennessee-Tombigee Waterway.

Based on the last available statistics provided by the corps, 1 dollars' worth of gasoline will move 1 ton of bulk cargo 5 miles by air, 15 miles by truck, 65 miles by train, 533 miles by waterborne barge.

That is the kind of facility we are talking about.

Let me say, while I am a strong believer that this would be a valuable national asset, if completed, and would serve well the people of Florida and this Nation, and would translate into millions of dollars worth of savings in coal transportation alone, not to mention other bulk commodities, I am not here today seeking construction moneys.

When this canal was stopped by the President several years ago, most of us in Florida felt that since it is a project of proprietary nature, we would need the substantial support from the people of Florida, including the Governor and others to bring about its completion. This is a project asked for by the State of Florida, participated in substantially by the local people and very substantially by the Federal Government. It is essentially one-third complete.

Again, I am not here seeking, nor have I sought completion moneys since its halt by President Nixon. I am asking only to keep it in place so that we might use the assets which are there for water impoundment, which is going to be extremely important to our State, and as a great recreation facility, and so we will be able to use the dams, locks, spillways and other structures in the future if we decide to move forward with the canal.

My view is contrary to that of Mr. MacKay, who I honor as a friend and as an outstanding Congressman. I believe this canal will one day be built. The economics will drive it. Important now is the consideration of the alternatives of which there are three.

The first I have alluded to—that is the completion of the canal. We are not seeking that at this time.

The second alternative would be to deauthorize the canal. If that happens, Mr. Chairman, according to the court rulings and according to every aspect of this that I can imagine, deauthorization would cause the drawdown of possibly, two of the finest recreational facilities in that part of the country.

Lake Ocklawaha is a manmade lake, an impoundment area, of tremendous importance. So is Lake Russo. Those two facilities every year entertain some nearly 2 million people. In any given day we will find the campsites active, waters lined with people enjoying the outside, fishing, boating, bird watching, floating on rafts down the beautiful waterways, enjoying those facilities to a tremendous extent.

If this canal is deauthorized, those facilities will be lost and immersed with every kind of lawsuit imaginable because the property was taken for the prime purpose of water transportation.

Some of it was taken for a secondary purpose—that of recreation facilities. But as the chairman I believe will understand, if we lose the purpose of the taking, then the property will revert to private ownership.

The courts have pretty well made that clear. If that happened, again, we would lose all of those assets of the dams, we lose the advantage of the spillways, we lose an opportunity to move freely from Lake Ocklawaha into the St. Johns River.

Some would have the dams, locks and spillways blown up. This would not make sense.

Most of the bridges, spillways, dams, and locks are in place. So it would seem unreasonable to me to waste all that money by deauthorization when we can have the best of two worlds by leaving it as is.

That brings me to the third alternative—that is to leave it like it is, harming no one and benefiting thousands. Lots of moneys are generated by the use of these facilities. The maintenance costs in my view are minimal. The operating costs are minimal when taking into consideration the great benefits we have.

So all that we are seeking is to do nothing. It makes commonsense to leave it authorized in my view so that we can use all of the facilities. We can have the opportunity at some future time to understand the advantages of water impoundment and transportation areas.

We are going to face a water shortage in that part of the country in the fairly near future; to give an opportunity to use these facilities for flood control while looking at the opportunity for construction makes good sense.

One final point; that is, that this area has developed its own ecology. It is a project which develops, creates marshland and in doing so, it has created a tremendous habitat for the bald eagle, for the osprey, for a number of other endangered species, both air and water, and land, I might mention.

It seems only commonsense to leave these in place so that future generations or later in our own generation, if we find the necessity to move forward with it, can effectively and efficiently do so.

So I believe the sensible commonsense thing to do is to do nothing, leave it authorized but unfinished now for completion. We can have all of the benefits that Mr. MacKay would like to see by doing nothing.

We will see every kind of lawsuit; some already have been brought if deauthorization now is agreed to.

We don't know what the future holds. Completion of a study required by the courts is in progress. The court ruled several years ago that the Corps of Engineers should bring up to date an unmet requirement—that is, the completion of the study. Our Committee on appropriation put in place just last year an order to the Corps of Engineers to complete that study, not a new study, not a restudy, a completion of a requirement unmet. Our committee in the House instructed the corps to complete that study out of its own funds.

They are in the process of that completion. It would seem to me that at least we ought to hold until that study is complete, and that should be complete in the next 12 months or so, perhaps sooner.

That will give us more information upon which to render our decision.

The reason it is not complete was that at the time the corps submitted its report to us, the source of coal was not identified for those coal-fired electric plants up and down the St. John's and in the Jacksonville area. There are other unmet requirements which the committee pointed out to the Corps of Engineers such as regional and other benefits. Those were not taken into account, as the corps admitted, and the committee found that that was an unmet commitment.

So at any rate, it seems commonsense to me that we do nothing, at least until we have an opportunity to review the completed report and then upon all of the information available decide what we ought to do.

Mr. Chairman, I hope that this committee will see fit to take no action, to leave the project authorized and have the best of two worlds. In any event and we can have a better time to make a decision on this matter.

Mr. Johnson, if I might, has a statement that he would like to put in the record and would like 1 minute, if you please.

Senator **ABDNOR**. Mr. Johnson, I will give you the 1 minute.

STATEMENT OF EDGAR LEO JOHNSON, PROJECTS CONSULTANT FOR FLORIDA WATERWAYS ASSOCIATION, INC.

Mr. **JOHNSON**. Perhaps it will take less.

Mr. MacKay mentioned that Lake Ocklawaha was the only question left. This is not so.

The Marion County Commission in its resolution was already referred to said flood control in Marion County is important. And this is something that needs to be dealt with and participated in by local government.

The local governments are fearful of the problems which would result in deauthorization.

If I might read from one part of my statement which is already filed.

Senator **ABDNOR**. It will be made a part of the record.

(See p. 281.)

Mr. **JOHNSON**. I am speaking on behalf of the Withlacoochee Regional Planning Council, planning agency for Citrus, Hernando, Levy, Marion, and Sumpter Counties, and on behalf of the county commissions of Marion, Citrus, and Putnam Counties, the Jacksonville Port Authority, Florida Voters League, Inc., and Florida Waterways Association, Inc.

These are opponents of the dauthorization bills because they are convinced that the study of the project recently begun by the U.S. Army Corps of Engineers, should be completed and assessed by all levels of Government before any consideration can possibly be given to deauthorizing the project.

In other words, the timing is wrong; these bills seek to "put the cart before the horse." To do this would be to "throw the baby out with the bath water."

So, at the end of my statement: Are the proponents of deauthorization fearful that the study will indicate the project is economically and environmentally sound?

Is that the reason they are in a hurry? Haste makes waste. We say to keep the horse in front of the cart and finish and review the study before other action is taken.

Thank you.

Senator **Abdnor**. Thank you, and Congressman Chappell and Congressman MacKay.

I assure you that this attracts a great deal of interest on both sides and we will give it careful consideration.

Thank you.

[Statements relating to the Cross Florida Barge Canal project and the bill S. 1131 follow:]

U. S. SENATOR LAWTON CHILES
May 17, 1983
Senate Committee on Environment and Public Works

I appreciate this opportunity to testify in support of my bill, S. 1131, to deauthorize the Cross-Florida Barge Canal project in the State of Florida. This issue is not new to the Senate Environment and Public Works Committee. The Senate has twice passed legislation recommended by this Committee in 1978 to terminate authority for the project. I am glad the Committee has seen fit to once again revisit the questions surrounding the future of the Cross-Florida Barge Canal. The history of the events leading up to wide-spread opposition to the project has not changed. However, several things have happened since the Committee last considered this matter, and these actions clearly warrant review and consideration. For this reason, I will touch briefly on background information which is part of this Committee's permanent record, and focus mainly on the present situation and the need for Congressional action on deauthorization legislation.

Congress first authorized the 110 mile Cross-Florida Barge Canal project in 1942. The original plan called for a canal extending across the width of the State from Yankeetown on the gulf to Palatka on the St. Johns River. Funds for the project were appropriated in 1962 and work began in 1964. By 1971 construction was one third completed, three of the five proposed locks were built, 25 miles of 12-foot channels were dug, and $73 million spent when the President, by Executive order, halted work on the project to prevent potential environmental damage. The Governor and Florida cabinet suspended any further support for the canal until completion of a new cost benefit analysis and an environmental impact statement.

The Corps of Engineers was assisted in the environmental assessment project by an interagency coordinating group consisting of Federal and State agencies. Among the participating agencies were the Department of Interior, Environmental Protection Agency, Department of Agriculture, Forest Service and State agencies including the Department of Natural Resources, Florida Game and Fresh Water Fish Commission, the Canal Authority and the Department of Administration.

It was concern with the environmental damage the canal would incure that prompted initial efforts to stop construction and undertake a restudy. The completed encironmental impact statement makes very clear that this concern was well judtified. The Washington-level policy group, consisting of the Departments of Agriculture and Interior as well as EPA and CEQ concluded that hydrologic, pollution, fish and wildlife, recreation and other environmental considerations as presented in the impact statement warranted a strong recommendation against completion of the canal.

Of particular importance is the threat construction and operation of the canal would pose for the Florida aquifer and consequently Florida's water supply. The Floridian aquifer is a water-filled underground layer of fragmented limestone which provides the region's supply of fresh water. Twenty-eight miles of the canal would cut down into this limestone, raising the possibility of interchange between canal waters and the rest of the aquifer. Information developed by professional hydrologists and geologists points to the prospect of serious contamination of the aquifer if such an interchange should take place.

Economic as well as environmental factors argue against completion of the barge canal project. The corps' 1977 restudy report and evaluation warranted the conclusion that the canal cannot be justified as a good investment. Using more realistic interest rates the restudy revealed the benefit/cost ratio of leaving the canal unfinished was greater than completing it.

The Corps' 1977 restudy, based on consideration of environmental and economic factos, concluded that completion of the canal was not warranted. This finding prompted the serious examination of the project by both Federal and State officials and led to abadonment of support for the canal by the President of the United States and the State of Florida. President Carter, in his environmental message of May 23, 1977 called for the termination of the barge canal project. Also in that year the Governor and Florida cabinet, acting as head of the Florida Department of Natural Resources, withdrew the States' official support and recommended against completion of the canal. These actions, coupled with the widespread public interest in Florida for terminating the canal project, motivated this Committee to favorably recommend legislation to deauthorize the Cross-Florida Barge Canal.

Unfortunately, the House of Representatives has never acted on the question of terminating construction of the Cross-Florida Barge Canal. The State of Florida, however, in light of its strong opposition to the project and the relunctance of Congress and the Administration to further fund construction of the project, enacted state legislation in 1979 to provide a plan of action once deauthorization is accomplished.

The legislation enacted by the State abolished the Florida Canal Authority and transfered its operations in the Department of Natural Resources. Once deauthorization legislation is passed, the State statute calls for the preparation of a land management plan which will decide future uses of lands now owned by the State of Florida. The statute contemplates the sale of certain recreational and scenic areas to the Federal Government for the purposes of expanding the Ocala National Forest. The legislation provides as well for the disposal of other State-held canal properties and the return of tax money to six counties along the canal route. These lands, acquired for the purposes of building the canal, are presently the subject of litigation in the State of Florida. I am including as part of my statement today a copy of the letter I have received from Florida's Attorney General, Jim Smith, expressing his support for the legislation and the complex legal situation the State is now facing with respect to the canal properties.

The State has acted responsibly in setting up a mechanism for disposing the State-held lands and returning tax monies to the six counties whose tax revenues financed the original acquisition of canal authority lands. The State, however, cannot work its will regarding the project and the lands until Congress acts to deauthorize the project.

The bill before the Committee today, S. 1131, terminates authority for further construction of the barge canal. In addition, it extends the boundary of the Ocala National Forest to include lands and interests in lands now owned by the State of Florida as well as Federal lands administered by the U.S. Army Corps of Engineers. This bill transfers lands administered by the Corps to the Secretary of Agriculture and authorizes the acquisition of lands within the new boundary by the Secretary of Agriculture from the State of Florida.

The time is now for the Senate to once again act on legislation to put to rest the future of the Cross-Florida Barge Canal and set in motion the State's plan for land disposal. This Committee can take an important step in this effort by reporting this legislation to the full Senate for consideration. Thank you again for this opportunity to speak in support of legislation to deauthorize the Cross-Florida Barge Canal.

PAULA HAWKINS
FLORIDA

United States Senate
WASHINGTON, D.C. 20510

May 18, 1983

The Honorable James Abdnor
Chairman
Subcommittee on Water Resources
Committee on Environment and Public Works
United States Senate
Washington, D.C. 20510

Dear Mr. Chairman:

I regret not being able to appear before the Subcommittee today to discuss Senate bill 1131. However, I am interested in raising some questions about the bill. My questions are as follows:

1. What will deauthorization mean for the future of the many sports and fishing recreation areas that canal construction has provided to Floridians?

2. What assurance do we, as federal elected officials, have that a State plan to maintain or modify stand-canal structures will reflect the interests of both preservationists and environmentally-minded sportsmen?

3. What effect will passage of this bill have on the availability of federal funds for flood control projects that were anticipated to be part of the construction of the canal?

4. If the canal project is deauthorized, who will absorb the cost of maintaining water resource and recreation facilities that have already been constructed as part of the project?

5. It has been suggested that unless Congress passes this deauthorization bill before the state appeals court in Daytona Beach renders a decision on a group of legal claims relating to barge canal lands, large portions of the canal lands will be lost to private interests at bargain basement prices.

   What is the legal basis for the position that passage of this deauthorization bill must occur before the state appeals court renders its decision in order to prevent the barge canal lands from being transferred at bargain rates?

My final question reflects my concern that this deauthorization bill need not be acted upon until other questions about the final effects of the bill are answered.

The Cross Florida Barge Canal has had a long and controversial history. The federal government and local governments have made substantial investments in the project over the years. If we are going to make a decision to end federal involvement in the project, we must make every effort to fashion a bill that addresses all the questions.

I appreciate this opportunity to submit questions for the panel to answer. I urge the Subcommittee to proceed on this matter in a careful but deliberative manner and only after considering the concerns that I have listed above.

Sincerely,

Paula

Paula Hawkins
United States Senator

STATEMENT OF THE HONORABLE
BILL CHAPPELL, JR., ON THE
CROSS-FLORIDA BARGE CANAL
BEFORE THE
SENATE ENVIRONMENT AND PUBLIC WORKS
SUBCOMMITTEE ON WATER RESOURCES

MAY 17, 1983

THANK YOU MR. CHAIRMAN FOR ALLOWING ME THE OPPORTUNITY OF APPEARING TODAY TO PRESENT MY VIEWS ON THE CROSS-FLORIDA BARGE CANAL PROJECT. THE REVIEW OF THIS PROJECT PRESENTS A CHALLENGE TO ALL INVOLVED IN THE MAKING OF A DECISION REGARDING THE FUTURE OF THE CANAL. RARELY DOES THE LEGISLATIVE ARM OF GOVERNMENT HAVE AN OPPORTUNITY TO LOOK TO THE FUTURE AND RESPOND TO A CRISIS BEFORE IT PEAKS. SUCH IS THE CASE HERE.

THE CROSS-FLORIDA BARGE CANAL REPRESENTS A MEANS BY WHICH WE WHO SERVE THE NATION CAN PROTECT FUTURE GENERATIONS. WE ARE STILL, AS A NATION, DEPENDENT UPON FOREIGN SOURCES FOR MUCH OF OUR RAW CRUDE. ALTHOUGH WE ARE IN A PERIOD OF SURPLUS AVAILABILITY, IT IS CLEAR TO ALL OF US THAT THERE WILL BE GREATER USE OF COAL FOR POWER GENERATION . THE CROSS-FLORIDA BARGE CANAL IS THE 110 MILE MISSING LINK (150' WIDE AND 12' DEEP) IN A 26,000 MILE NATIONAL INLAND WATERWAY SYSTEM WHICH EXTENDS FROM THE GULF COAST AND THE COAL-RICH WESTERN AND MIDWESTERN PARTS OF THE COUNTRY TO THE ATLANTIC AND EASTERN SEABOARD, INCLUDING THE SHORTENED ROUTE FROM THE MIDWEST VIA THE TENNESSEE - THOMBIGEE WATERWAY. BASED ON LAST AVAILABLE STATISTICS PROVIDED BY THE CORPS OF ENGINEERS, $1 OF GASOLINE WILL MOVE ONE TON OF BULK CARGO:

5 MILES BY AIR
15 MILES BY TRUCK
65 MILES BY TRAIN
333 MILES BY WATER BORNE BARGE

MR. CHAIRMAN, MY POINT IS THE QUESTION YOU HAVE UNDER CONSIDERATION TODAY - THE CROSS-FLORIDA BARGE CANAL PROJECT IS A NATIONAL ISSUE, NOT JUST A STATE OR LOCAL ISSUE. THERE HAS BEEN A GREAT DEAL OF EMOTION CONCERNING THIS PROJECT AND HOPEFULLY, THIS HEARING WILL BE SUCCESSFUL IN SEPARATING THE FACTS FROM THE FICTION.

AS YOU KNOW, THE CROSS-FLORIDA BARGE CANAL WAS FIRST AUTHORIZED BY CONGRESS IN 1942, LONG BEFORE I CAME TO CONGRESS. WHEN I CAME TO CONGRESS IN 1969, THE PROJECT WAS FULLY AUTHORIZED AND PARTIALLY FUNDED. TO DATE, THE THREE DAMS REQUIRED HAVE BEEN COMPLETED, THREE OF FIVE LOCKS HAVE BEEN COMPLETED, AND FOUR OF ELEVEN HIGHWAY BRIDGES HAVE BEEN CONSTRUCTED AT A CONSTRUCTION COST OF $60 MILLION TO THE FEDERAL GOVERNMENT. THE CORPS ESTIMATES THAT, IN 1977 DOLLARS, IT WILL REQUIRE AN ADDITIONAL $250 MILLION TO COMPLETE THE ENTIRE PROJECT. THIS INCLUDES THE COST TO REALINE THE CANAL ROUTE AWAY FROM THE OKLAWAHA RIVER SWAMP TO MINIMIZE OR ELIMINATE ANY POSSIBLE ENVIRONMENTAL DAMAGE.

I HAVE CONSISTENTLY TAKEN THE POSITION THAT I WOULD NOT SUPPORT THE PROJECT UNLESS PROPER STUDY SHOWED IT TO BE ECONOMICALLY AND ECOLOGICALLY SOUND. THEREFORE, IN AN EFFORT TO SEPARATE FACT FROM FICTION BY SUCH A STUDY, I ACTIVELY SOUGHT AND HELPED TO WIN CONGRESSIONAL APPROVAL TO PROVIDE THE $2.6 MILLION FOR THE EXHAUSTIVE ENVIRONMENTAL AND ECONOMIC RESTUDY OF THE CROSS-FLORIDA BARGE CANAL PROJECT NOW AVAILABLE TO YOUR COMMITTEE. AFTER A THREE YEAR RESTUDY EFFORT MANAGED BY THE CORPS OF ENGINEERS AND PARTICIPATED IN BY OUTSIDE, INDEPENDENT ORGANIZATIONS WITH ACKNOWLEDGED EXPERTISE IN THEIR FIELD I AM TOTALLY CONVINCED THAT THE CROSS-FLORIDA BARGE CANAL IS BOTH ECONOMICALLY AND ECOLOGICALLY SOUND: THAT THEREFORE FURTHER PROJECT CONSTRUCTION AND

OPERATION WOULD RESULT IN NO ADVERSE ENVIRONMENTAL IMPACTS THAT CANNOT COMPLETELY BE OVERCOME BY SOUND ENGINEERING PRACTICES, THAT NO DAMAGE WOULD RESULT TO THE AQUIFER, THAT THE WATER SUPPLY OF SOUTH FLORIDA WOULD NOT IN ANYWISE BE AFFECTED, THAT THERE WOULD BE NO DANGER OF SALT WATER INTRUSION, THERE WOULD BE NO LOWERING OF THE WATER TABLE -- ASIDE FROM MINOR SCATTERED FLUCUATIONS ALONG THE IMMEDIATE CANAL LITTORAL, AND THAT THE CANAL WOULD PROVIDE BOTH FLOOD CONTROL AND WATER STORAGE. IN ADDITION, THERE WOULD BE NO RARE OR ENDANGERED SPECIES SIGNIFICANTLY AFFECTED. ON THE OTHER HAND, PROJECT COMPLETION WOULD INCREASE THE HABITAT FOR OSPREYS, EAGLES, WADING BIRDS, WATER FOWL AND ALLIGATORS, TO MENTION ONLY A FEW ENDANGERED SPECIES. CONSTRUCTION TO DATE HAS ENHANCED FISHERIES AND PROVIDED INCREASED HABITAT FOR NESTING SEA BIRDS AND DIAMOND-BACK TERRAPINS. MR. CHAIRMAN, I WOULD LIKE TO POINT OUT THAT THIS ASSESSMENT IS NOT MINE ALONE BUT IT IS THAT OF THE HOUSE APPROPRIATION SUBCOMMITTEE ON PUBLIC WORKS OF WHICH I AM A MEMBER. THIS ASSESSMENT WAS BASED UPON THE CORPS FINDINGS AND THE SUBCOMMITTEE HEARINGS ON THE CORPS' CROSS-FLORIDA BARGE CANAL RESTUDY EFFORT ON APRIL 21, 1977. RATHER THAN TAKING THE SUBCOMMITTEE'S TIME REVIEWING THAT HEARING IN DETAIL, I WOULD REQUEST THE CHAIRMAN'S PERMISSION TO INSERT, AT THIS POINT IN THE RECORD, THE TEXT OF THAT HEARING AND PAGES 68 & 69 OF THE HOUSE COMMITTEE ON APPROPRIATIONS REPORT ACCOMPANYING THE PUBLIC WORKS FOR WATER AND POWER DEVELOPMENT AND ENERGY RESEARCH APPROPRIATION BILL, FY 1978 WHICH STATES THE COMMITTEE'S POSITION ON THE CROSS-FLORIDA BARGE CANAL PROJECT.[*] IN SUMMARY, THE COMMITTEE FOUND THAT PROJECT CONSTRUCTION AND OPERATION WOULD RESULT IN NO ADVERSE

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[*] Retained in the committee files.

ENVIRONMENTAL IMPACTS THAT CANNOT BE COMPLETELY OVERCOME BY SOUND ENGINEERING PRACTICES AND THAT ECONOMIC BENEFITS FOR THE CROSS-FLORIDA BARGE CANAL PROJECT COULD RANGE AS HIGH AS 5 TO 1, OR HIGHER. THIS DETERMINATION STEMS FROM THE FACT THAT THE CORPS RESTUDY DID NOT INCLUDE FOUR CATEGORIES OF ECONOMIC BENEFITS IN THE OVERALL ASSESSMENT. CORPS WITNESSES ACKNOWLEDGED THAT FURTHER ECONOMIC STUDIES IN ACCORDANCE WITH THE PROVISIONS OF SECTION 140 IS AN UNMET REQUIREMENT, AND THE HOUSE COMMITTEE ON APPROPRIATIONS AGREES THAT THE RESTUDY REPORT IS NOT COMPLETE IN THE ABSENCE OF AN ECONOMIC ASSESSMENT WHICH INCLUDES CONSIDERATION OF (1) AREA REDEVELOPMENT, (2) REGIONAL ECONOMIC BENEFITS, (3) CONTINGENCY BENEFITS, AND (4) THE MOVEMENT OF COAL BY BARGE.

MR. CHAIRMAN, IT IS WITH A DEEP SENSE OF INJUSTICE THAT I WOULD NOW RESPECTFULLY POINT OUT A PARTICULARLY OBJECTIONABLE FACT WHICH BEARS DIRECTLY ON THESE PROCEEDINGS. THERE IS, AS WE GATHER HERE THIS DAY, AN ONGOING CORPS OF ENGINEERS COMPLETION OF THEIR 1977 COST-BENEFIT STUDY WHICH WAS AUTHORIZED BY THE 97TH CONGRESS. NO NEW FUNDS WERE ALLOCATED. FUNDING FOR THE COMPLETION OF THE STUDY WAS SPECIFICALLY EARMARKED FROM EXISTING APPROPRIATIONS. TO RECOMMEND TO DEAUTHORIZE A VITAL NATIONAL WATER TRANSPORTATION PROJECT IN THE ABSENCE OF ALL OF THE FACTS, AND IN THE MIDST OF AN ONGOING STUDY, IS UNCONSCIONABLE. IT ABSOLUTELY AND PATENTLY IGNORES THE BEST INTERESTS OF THE TAXPAYERS AND THE NATION. TO PROCEED TO DETERMINE WHETHER OR NOT TO DEAUTHORIZE, BASED ON HALF-FACTS, IS INEXCUSEABLE.

ENDANGERED SPECIES

THE FINAL SUMMARY ENVIRONMENTAL IMPACT STATEMENT ON PAGE 16, STATES: "NONE OF THE PROJECT AREA HAS BEEN DECLARED CRITICAL HABITAT

FOR ANY ENDANGERED SPECIES." FURTHER, ON PAGE 36c OF THE FINAL SUMMARY, THE CORPS MAINTAINS THAT THERE WILL BE NO IMPACT ON ENDANGERED PLANT SPECIES.

LAKE OCKLAWAHA

THIS MANMADE LAKE, CREATED DURING EARLIER CONSTRUCTION, HAS GAINED NATIONAL REPUTATION AS AN EXCELLENT NATIONAL RESOURCE FOR BOTH FISHING AND RECREATION. ON PAGE 32 OF THE FINAL EIS, IT IS POINTED OUT THAT THE LAKE OCKLAWAHA BASS CATCH RATE OF .16 PER FISHING MAN-HOUR WAS MORE THAN TWICE THAT OF ANY OTHER REACH, EXCEPT LAKE ROUSSEAU (.12).

OKLAWAHA RIVER

THERE HAS BEEN MUCH SAID ABOUT DESIGNATING THE OKLAWAHA RIVER FOR STUDY AS A WILD AND SCENIC RIVER. THE FINAL EIS REPORT, ON PAGE 35, CONCERNING THIS ISSUE STATES: "A LATER AND INDEPENDENT STUDY BY THE U.S. BUREAU OF OUTDOOR RECREATION (1975) ELIMINATED THE OKLAWAHA RIVER FROM CONSIDERATION FOR WILD AND SCENIC RIVER STATUS BECAUSE, IT IS (1) PARTLY IMPOUNDED, (2) PARTLY CHANNELIZED, AND (3) THE REMAINDER TOO SHORT TO MEET THE CRITERIA." FURTHERMORE, THERE HAS BEEN DEVELOPMENT ON OTHER SEGMENTS OF THE OKLAWAHA WHICH FURTHER REDUCES ITS ELIGIBLE LENGTH.

SUNK COSTS

IN THE RESTUDY EFFORT BY THE CORPS, THE $60 MILLION ALREADY INVESTED IN CANAL CONSTRUCTION, WAS INCLUDED IN THE COST TO COMPLETE

THE PROJECT. HAD THESE COSTS NOT BEEN INCLUDED IT WOULD HAVE RAISED THE CORPS' BENEFIT - COST RATIO TO 1.27 TO 1. IT IS WIDELY RECOGNIZED THAT SUNK COSTS SHOULD NOT BE USED IN DETERMINING WHETHER OR NOT A PROJECT SHOULD BE COMPLETED. IN FACT, WHEN PRESIDENT CARTER UNDERTOOK HIS REVIEW OF ONGOING WATER PROJECTS IN 1977, HE SPECIFICALLY EXCLUDED "SUNK COSTS" IN DETERMINING ECONOMIC VIABILITY. IN MY VIEW, IT IS TOTALLY INCONSISTENT POLICY FOR THE CORPS TO USE "SUNK COST" IN THE EVALUATION OF THE CROSS-FLORIDA BARGE CANAL PROJECT WHILE AT THE SAME TIME EXCLUDING "SUNK COST" FROM OTHER WATER RESOURCE PROJECTS.

PRESENT STATUS

LOCAL UNITS OF GOVERNMENT HAVE EXPENDED OVER $13 MILLION TO PURCHASE THE REQUIRED RIGHT-OF-WAY FOR THIS PROJECT, WHICH WAS ACQUIRED BY THE CANAL AUTHORITY PRIMARILY THROUGH CONDEMNATION PROCEEDINGS FOR THE PRIME PURPOSE OF WATER TRANSPORTATION AND SECONDARILY FOR RECREATION. TITLE WAS THENCE TRANSFERRED TO THE FEDERAL GOVERNMENT. IN MY VIEW, ANY ABANDONMENT OF THIS PROJECT BY THE FEDERAL GOVERNMENT WILL RESULT IN A RETURN OF THE ACQUIRED LAND TO THE ORIGINAL OWNERS AND WILL ENTAIL LENGTHY AND COSTLY LEGAL PROCEEDINGS. MY VIEW IN THIS MATTER IS SUPPORTED BY A RECENT FINAL JUDGMENT RENDERED BY THE CIRCUIT COURT, FIFTH JUDICIAL CIRCUIT, IN AND FOR MARION COUNTY, FLORIDA, IN OCALA MANUFACTURING, ICE AND PACKING COMPANY VS. THE CANAL AUTHORITY OF THE STATE OF FLORIDA, A BODY CORPORATE UNDER THE LAWS OF THE STATE OF FLORIDA. THE COURT, IN ITS DECISION ENTERED ON SEPTEMBER 28, 1977 STATED, INTER ALIA, THE FOLLOWING:

"IT IS THEREFORE ORDERED AND ADJUDGED:

1. THAT UPON THE HAPPENING OF ANY OF THE FOLLOWING EVENTS;

A. THE CONGRESS OF THE UNITED STATES OF AMERICA DEAUTHORIZES THE CROSS-FLORIDA BARGE CANAL PROJECT.

B. THE UNITED STATES CONGRESS FAILS TO APPROPRIATE FUNDS FOR THE CONSTRUCTION OF THE CROSS-FLORIDA BARGE CANAL AND THE EUREKA POOL, WITHIN FOUR YEARS FROM THE DATE HEREOF.

C. THE LEGISLATURE OF THE STATE OF FLORIDA ABOLISHES THE DEFENDANT OR ATTEMPTS TO TRANSFER ITS ASSETS IN CONJUNCTION WITH SUCH ABOLISHMENT OR OTHERWISE.

D. THE LEGISLATURE OF THE STATE OF FLORIDA ENACTING LEGISLATION PROHIBITING THE CONSTRUCTION OF THE CROSS-FLORIDA BARGE CANAL AND THE EUREKA POOL."

THE TITLE TO THE DESCRIBED LANDS SHALL REVEST IN THE OCALA MANUFACTURING COMPANY, SUCCESSOR IN INTEREST TO OCALA MANUFACTURING, ICE AND PACKING COMPANY, UPON THE DEPOSIT IN THE REGISTRY OF THIS COURT OF THE SUM OF $395,848.50.

DONE AND ORDERED IN OCALA, MARION COUNTY, FLORIDA, THIS 28th DAY OF SEPTEMBER, 1977.

s/ W. STURGIS
CIRCUIT JUDGE

THIS JUDGEMENT WAS AFFIRMED ON APPEAL TO THE 1st DISTRICT COURT OF APPEAL, STATE OF FLORIDA ON JANUARY 3, 1979. PER-CURIAM DECISION, JUDGES DECIDING BEING ACTING CHIEF JUDGE BOYER, SMITH AND BOOTH CONCURRING.

MR. CHAIRMAN, I WOULD LIKE PERMISSION TO INCLUDE A COPY OF JUDGE STURGIS'S RULING AT THIS POINT IN THE RECORD. */

PUBLIC SUPPORT

MR. CHAIRMAN THERE IS A PERPONDERANCE OF EVIDENCE OF ORGANIZED SUPPORT FOR THIS PROJECT BY KNOWLEDGEABLE AND RESPECTED BOARDS, GOVERNMENT ENTITIES, AUTHORITIES, AND EMMINENT MEMBERS OF THE BUSINESS ESTABLISHMENT, ALL OF WHOM

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*/ Retained in the committee files.

ARE PROPONENTS OF THE CROSS-FLORIDA BARGE CANAL. THERE ARE MAYORS, CORPORATE OFFICERS, CIVIC LEADERS, PRIVATE INDIVIDUALS, AND MOST OF ALL A MAJOR CONSTITUENCY IN THE STATE OF FLORIDA WHO LOOK TO THIS BODY TO MAKE A DECISION BASED UPON ALL OF THE FACTS BEING AVAILABLE. ALL OF THE FACTS ARE NOT AVAILABLE. ALL OF THE INPUT HAS NOT BEEN RECEIVED. THIS IS NOT AN EMOTIONAL OR POLITICAL ISSUE. IT IS AN ISSUE WHICH SHOULD BE BASED ON IRREFUTABLE AND INDISPUTABLE INFORMATION; INFORMATION WHICH IS IN HAND. IT MAY BE THAT WHEN THE ONGOING STUDY IS COMPLETE THIS INFORMATION MAY SUPPORT THE CASE FOR AUTHORIZATION CONTINUANCE OR EVEN DEAUTHORIZATION. BUT TO ACT WITHOUT ALL THE PARTICULARS IS TO SEEK EXPEDIENCE INSTEAD OF EXPERTISE. THIS CANNOT AND MUST NOT BE ACCEPTABLE IN THE CASE OF AN ISSUE AS COMPLEX AS THIS.

BASED UPON THE WEIGHT OF THE EVIDENCE PRESENTED TO THE PUBLIC WORKS SUBCOMMITTEE OF THE HOUSE COMMITTEE ON APPROPRIATIONS BY THE CORPS OF ENGINEERS IN SUPPORT OF THEIR RESTUDY EFFORT - WHICH HAS YET TO BE COMPLETED - I MUST STRONGLY OPPOSE ANY EFFORT TO TERMINATE FURTHER CONSTRUCTION OF THE CROSS-FLORIDA BARGE CANAL PROJECT.

I WANT TO THANK THE CHAIRMAN FOR ALLOWING ME TO EXPRESS MY VIEWS.

Remarks of

CONGRESSMAN BUDDY MacKAY
Sixth District, Florida

before the
Subcommittee on Water Resources
Senate Committee on Environment and Public Works

May 17, 1983

IN SUPPORT OF S. 1131, TO DEAUTHORIZE THE CROSS-FLORIDA BARGE CANAL

Mr. Chairman, I appreciate having this opportunity to come before the Subcommittee to urge the inclusion of the provisions of S. 1131 by Senator Lawton Chiles within the Subcommittee's "omnibus" water projects bill. Senator Chiles' bill would deauthorize the Cross-Florida Barge Canal project. I have filed identical legislation, H.R. 2695, in the House of Representatives.

The Cross-Florida Barge Canal was first authorized by the Congress in 1942. No funds were appropriated for the project, however, until 1962 and work actually began on the project in 1968. In 1971, President Nixon halted construction of the Canal project citing serious environmental concerns. Subsequently, the environmental risks have been further substantiated and the economic benefits of the project have dwindled to the point that in a report to the Secretary of the Army in 1977, the Chief of Engineers stated "when the marginal economic justification is combined with the adverse environmental impacts, the combined total effect does not favor completion."

In 1977, the Governor and elected Cabinet of Florida, acting as the head of the Florida Department of Natural Resources (and now serving as the Barge Canal Authority) adopted a resolution opposing completion of the canal and withdrawing the State's support for the project.

Two years later, in 1979, the Florida Legislature passed legislation, which would be triggered by Federal deauthorization legislation, which establishes a carefully prepared procedure for disposition of canal assets. The key provisions of that state law would:

1.) mandate the preparation of a land management plan to determine the proper use or disposition of lands currently held in public ownership,

2.) provide for the sale of Lake Ocklawaha and lands surrounding it to the federal government for inclusion in the Ocala National Forest (as is provided in S. 1131 and H.R. 2695), and

3.) provide for the reimbursement of the six counties of the Cross-Florida Canal Navigation District for the ad valorem taxes contributed to the Canal Authority for land acquisition.

I state this for the record, Mr. Chairman, to demonstrate that this project no longer has official support from the State of Florida. It is the policy of the Corps of Engineers to seek funds only for projects which have state support. The Corps of Engineers has not asked for construction funds for the completion of the project. No construction funds have been spent in the past 12 years. As a result, I believe you would be hard pressed to find many people in Florida who actually believe that one more dollar of Federal funds will be appropriated for the construction of this project.

Why then, if the canal is not likely to be completed, is deauthorization necessary? Why not, as some suggest, preserve the status quo? Wouldn't the status quo better preserve the recreational uses of Lake Ocklawaha, a goal some deauthorization opponents espouse as key to their position?

The need for prompt action on deauthorization legislation is very succinctly stated in a letter I have received from the Attorney General of Florida, the Honorable Jim Smith. I have attached a copy of that letter to my statement and would ask that it be included with my testimony in the record of this hearing.

In May of 1982, a circuit court in Florida held that the canal project had effectively been abandoned and ordered that property condemned for the canal be returned to its previous owners. The State of Florida has appealed the decision and the Attorney General states that he is confident that the legal precedents do not support the circuit court's ruling. However, a decision on that appeal is not expected for several months.

In the meantime, Florida Power and Light Company has filed suit in the same circuit court, seeking to reclaim over nine thousand acres of land it previously owned. This land, under and around Lake Ocklawaha, now constitutes the bulk of the area which would become a portion of the Ocala National Forest under the state and Federal legislation. At this point, the Attorney General has little reason to believe that the same judge would rule differently in this case than he did in the first.

The result of these legal actions is to seriously complicate the ability of the State or the Federal government to either provide for the orderly disposition of canal assets, including reimbursing the counties, or completion of the project should there be a dramatic reversal of thinking at the state or Federal levels.

The Florida Attorney General argues most persuasively that the status quo is unacceptable. Swift action is necessary in order to prevent legal entanglements which could take decades and countless dollars in legal fees to unravel.

If, as some opponents to deauthorization suggest, the preservation of Lake Ocklawaha is key to their position, I strongly believe that the passage of deauthorization legislation which contains a specific authorization for the Federal government to acquire the lake is vastly superior to maintaining the current situation. This is particularly true in light of the Florida Power and Light Company suit to reclaim what had been their land and which is now largely beneath Lake Ocklawaha. Should they win their suit, would they be entitled to have their land returned to them in its former condition? Could the court mandate the draw down of the Lake in order to do so? As the Attorney General of Florida has stated, the risk to the preservation of Lake Ocklawaha is greater if the canal is left in limbo, than if the canal is deauthorized under the coordinated provisions of the Florida Statute and Senator Chiles' bill.

The uncompleted portion of the Cross-Florida Barge Canal lies within the Sixth Congressional District of Florida, which I represent. All of the environmental damage not already done will occur in my district. I cannot condone that environmental damage — which directly threatens the Floridan Aquifer which provides fresh water for virtually all of Florida south of the canal route — when the project offers only "marginal" economic return, according to the Corps of Engineers.

The Governor of Florida — in fact, each of the past three Governors — opposes the completion of the canal. The elected Florida Cabinet, which serves as the Canal Authority, opposes the completion of the canal. The Florida Legislature has passed legislation which contemplates deauthorization and provides for the orderly disposition of canal assets.

Mr. Chairman, the time has come to permit the State of Florida to implement its 1979 law with respect to the disposition of the canal lands. It is time to remove the threat of further environmental damage. It is time to permit the counties along the canal route to be repaid the taxes they paid for right-of-way acquisition. It is time to return the surplus lands to the tax roles.

In short, it is time to deauthorize the Cross-Florida Barge Canal. As the Congressman representing the district which contains the uncompleted portion of the canal, I strongly urge you to include the provisions of S. 1131, including the authorization to expand the Ocala National Forest to include Lake Ocklawaha, in any omnibus water projects bill reported by the Subcommittee.

Thank you very much, Mr. Chairman.

# # # # #

DEPARTMENT OF LEGAL AFFAIRS
OFFICE OF THE ATTORNEY GENERAL
THE CAPITOL
TALLAHASSEE, FLORIDA 32301

JIM SMITH
Attorney General
State of Florida

May 3, 1983

Honorable Buddy MacKay
United States Congressman
503 Cannon House Office Building
Washington, D.C. 20515

RE: Cross-Florida Barge Canal Project

Dear Congressman MacKay:

I am aware that bills have been introduced in both houses of Congress which would deauthorize the Cross-Florida Barge Canal Project. There are several matters which need to be considered in relation to this proposed legislation. Therefore, this letter is being sent to each member of Florida's Congressional delegation.

As you know, in 1971 President Nixon ordered a halt to construction of the canal project. After extensive studies, which included consideration of an alternative completion route, the U.S. Army Corps of Engineers in 1977 recommended against completion of the canal because of an unfavorable cost benefit analysis. That same year the Governor and Cabinet of Florida, sitting as the head of the Florida Department of Natural Resources, adopted a resolution recommending that Congress deauthorize the canal.

In 1979, in anticipation of deauthorization, the Florida Legislature enacted Chapter 79-167, Laws of Florida. This law will become effective only if the canal is deauthorized. Some of the salient features of the 1979 legislation are:

> It requires preparation of a land management plan which will decide future uses of lands now owned by the Canal Authority (a state agency composed of the Governor and Cabinet which owns most of the lands acquired for the canal project).

> It provides for sale to the federal government of a large area which includes most of Lake Ocklawaha (Rodman Pool) and lands along the Oklawaha River which were to have become Eureka Pool. These lands are to be sold at fair market value for inclusion in an expanded Ocala National Forest. Their use must be consistent with the land management plan for that area.
>
> The Florida Department of Natural Resources is empowered to acquire by purchase, exchange or eminent domain the fee simple interest in lands to be included in the Ocala National Forest where the Canal Authority originally acquired less than the fee.
>
> Lands determined to be surplus by the management plan are to be offered for sale at fair market value - first to the original owner, then to the county, then to the public at auction.
>
> The six counties of the Cross Florida Canal Navigation District - Duval, Clay, Putnam, Marion, Levy and Citrus - are to be refunded with interest the ad valorem tax revenues contributed to the Canal Authority for land acquisition. (The principal amount of the counties' contribution was $9,340,720.94. Principal and interest now total some $32 million and is accumulating at the rate of 8 per cent per year.)
>
> The primary mechanism for repaying the six counties is the sale of surplus Canal Authority lands.

As a result of recent circuit court decisions in Florida, this orderly plan for disposition of Canal Authority lands, and even the possibility of completion should Congress choose that, are threatened by further delay. In May, 1982, the circuit court in Marion County held in suits filed by eleven former land owners that the canal project has been effectively abandoned and that the former owners of land should be revested with title. Appeals of those judgments are now pending before the Fifth District Court of Appeal in Daytona Beach. Although we firmly believe that legal precedent is against the circuit court's rulings, one cannot discount the possibility that the judgments may be affirmed. However, we do not anticipate having a decision from the Fifth District Court of Appeal for at least several months.

Since those cases were tried, Florida Power and Light Company has filed suit in Marion County seeking to recover title to over nine thousand acres of land the Canal Authority owns in fee simple. Of this, 3,248 acres are under or around Lake Ocklawaha, and 5,900 acres border the Oklawaha River in the proposed Eureka Pool area. All of this land is environmentally sensitive and is part of the area proposed for inclusion in the Ocala National Forest. Unfortunately, we expect the circuit court will follow its previous rulings at the trial of this case which is now scheduled for June 24, 1983.

The implications of the courts' decisions in these cases are serious. First, if all or most of the Canal Authority lands are returned to private ownership, the protection of sensitive ecological resources contemplated by the 1979 legislation, or any degree of restoration, will be vastly complicated if not made impossible. Present and future recreational uses may also be thwarted. Further, should Congress decide to complete the Canal, it is obvious enormous duplicative expenditures would be necessary if the land reverts to private ownership.

The circuit court also decided that the former land owners were entitled to the land upon their repayment of the 1960s purchase price, not current fair market value. The effect of this may well be to deprive the six counties of the navigation district--Duval, Clay, Putnam, Marion, Levy and Citrus--of some portion of the amount they are to be paid under the 1979 legislation. Although the land management plans are not complete, there appears to be just sufficient land available for sale at fair market value to repay the interest. It is doubtful however that these lands are appreciating at the rate of eight percent per year. Thus, the longer deauthorization is delayed the more difficult it will be to repay the counties. If the land should revert to previous owners for the 1960s prices, full repayment to the six counties and their taxpayers will not be possible.

I trust you will find this helpful in your decision regarding the canal. I believe that delay in resolving the fate of the canal will further complicate an already complex situation. Therefore, your prompt action on this bill is highly desirable. If I may provide you any more information, please call on me.

Sincerely,

Jim Smith

Attorney General

JS/Hjh

cc: Governor and Cabinet
Elton Gissendanner, Executive Director
Department of Natural Resources

DEPARTMENT OF LEGAL AFFAIRS
OFFICE OF THE ATTORNEY GENERAL
THE CAPITOL
TALLAHASSEE, FLORIDA 32301

JIM SMITH
Attorney General
State of Florida

May 12, 1983

Honorable James Abdnor
United States Senator
Hart Building, Suite 309
Washington, D.C. 20510

Re: Cross-Florida Barge Canal

Dear Senator Abdnor:

I understand that on May 17, 1983, the Senate Water Resources Subcommittee will hold a hearing on S. 1131, a bill to deauthorize the Cross-Florida Barge Canal Project. You have requested submittal of written comments to the subcommittee.

For inclusion in the record of the hearing, I am submitting this letter along with a copy of a letter dated May 3, 1983, which I sent to each member of the Florida Congressional delegation. The letter of May 3rd discusses in some detail the adverse consequences which may result from the failure of Congress to act on the deauthorization legislation. I trust that you and other members of the Committee on Environment and Public Works will carefully consider the points discussed therein.

As you know, a number of adverse environmental effects can be expected if construction of the canal goes forward. These include further disruption of the Oklawaha River Valley, a unique resource of the state. In addition, the Corps of Engineers has acknowledged the present cost-benefit ratio does not justify completion of the canal project. For these reasons, as well as those set forth in my letter of May 3rd, I urge your prompt and favorable action on S. 1131.

Thank you for your consideration of this letter.

Sincerely,

Attorney General

JS/Hlv
Enclosure

STATE OF FLORIDA

OFFICE OF GOVERNOR BOB GRAHAM

May 13, 1983

Honorable James Abdnor, Chairman
Subcommittee on Water Resources
Senate Committee on Environment
and Public Works
SD 625 - Dirksen Senate Office Building
Washington, D.C. 20510

Dear Senator Abdnor:

Prompt passage of pending Federal legislation to deauthorize the Cross-Florida Barge Canal (S. 1311) has my personal support. The State of Florida, after extensive hearings and examinations, recommended by resolution (enclosed) of the Governor and Cabinet on January 17, 1977, against completion of the project and requested that the U.S. Congress deauthorize the Cross-Florida Barge Canal project. The Florida legislature has expressed similar views.

In 1977, the Chief of the Corps of Engineers recommended that the Canal project be terminated because of a low benefit/cost ratio and lack of State support. I have on numerous occasions expressed my support for deauthorizing this project because the overwhelming evidence, both economic and environmental, cannot justify resumption or completion of the Barge Canal.

In view of the absence of State and Federal support for this unnecessary project and recognizing that the Senate has twice passed similar deauthorizing legislation, I am hopeful that you will lend your active support for passage of S. 1311.

I understand that the Senate Water Resources Subcommittee, which you so ably chair, is currently considering a new Water Resources Development Act (S. 947). I strongly urge your favorable consideration for inclusion of the provisions of the Barge Canal deauthorization bill in any new project authorization legislation.

Honorable James Abdnor
Page Two

I ask that this request be included in your Subcommittee's hearing record, and I would welcome the opportunity to provide you with any additional assistance which you may require in this matter.

With kind regards,

Sincerely,

Bob Graham

Governor

BG/rcs

Enclosure

cc: Honorable Lawton Chiles
Honorable Paula Hawkins

RESOLUTION

WHEREAS, the Governor and Cabinet of Florida, sitting as Head of the Department of Natural Resources, on August 1, 1972, rescinded their previous policy supporting completion of the Cross Florida Barge Canal through the Oklawaha River Valley and on that date suspended their support of this project until such time as:

1. A new benefit-cost ratio study, which includes up-to-date interest rates and construction costs and re-evaluation of recreational benefits, is completed and demonstrates to the satisfaction of the State that this is a wise expenditure of taxpayers funds.

2. An environmental impact statement, as required by Section 102 of the National Environmental Policy Act, is completed and available to the State for final evaluation as to the environmental effects of the Canal.

WHEREAS, restudy documents were prepared and released by the U. S. Corps of Engineers in the summer of 1976 and did contain a draft environmental impact statement and a benefit/cost ratio study displaying up-to-date interest rates which were additionally updated in December 1976; and

WHEREAS, the Governor and Cabinet of Florida, sitting as the Head of the Department of Natural Resources, on December 16 and 17, 1976, did consider the restudy documents and take public testimony relative to the Cross Florida Barge Canal;

NOW THEREFORE BE IT RESOLVED THAT:

A. The Governor and Cabinet, sitting as the Head of the Department of Natural Resources, and recognizing the authority of the United States Congress to complete the canal, respectfully:

1. Recommend against completion of the Cross Florida Barge Canal Project.

2. Request the United States Congress to de-authorize the Cross Florida Barge Canal Project.

3. Recommend to the United States Congress that it authorize and appropriate sufficient funds for federal participation in and implementation of the following recommendations:

(a) Establishment of a State-Federal Task Force to study and recommend the best disposition and use of the canal lands with special emphasis on:

(1) Restoration of the Oklawaha River, its designation as a wild and scenic river, and its inclusion in the Ocala National Forest;

(2) Use of other remaining canal lands for public recreational and environmental purposes especially to meet the present and future needs of the canal-area counties; and

(b) Lands previously supplied by the State of Florida to the Federal Government and not necessary for use by the Federal Government for a wild and scenic river system or Ocala National Forest be returned to the State of Florida.

4. Direct the staff of the Department of Natural Resources to coordinate state efforts in an interagency State-Federal Task Force to study and recommend the best disposition and use of the canal lands with special emphasis on restoration of the Oklawaha River, its designation as a wild and scenic river, and its inclusion in the Ocala National Forest.

5. Direct the Division of State Planning of the Department of Administration to study and make specific recommendations for applications to be made by the State of Florida to the United States Congress for funding of sewage treatment construction projects in the State of Florida, for federal impact funds for economically depressed areas, as well as other federal funds which will have an impact on the State of Florida.

B. The Governor and Cabinet, sitting as the Head of the Department of Natural Resources, recommend to the 1977 Florida Legislature that:

1. The responsibilities of the Canal Authority be amended in order to retain public ownership of the lands associated with the project as necessary to accomplish "A" above.

2. Legislation be enacted which will permit appropriate title to be secured for those lands currently held in easement as necessary to accomplish "A" above.

3. Title to the lands associated with the project retained by or returned to an agency of the state be transferred to the Trustees of the Internal Improvement Trust Fund.

4. Chapter 374, Florida Statutes, Part II, (Sections 374.301-374.521) be repealed and any funds remaining in the accounts of the Cross Florida Canal Navigation District and not legally obligated, be returned to the counties in the District on a prorata basis, established by the tax monies furnished to the District by these counties.

5. Section 20.25(12), Florida Statutes, be amended to read "The canal authority of the State of Florida, created under part I of Chapter 374, is transferred by a type three transfer to the Department of Natural Resources and the functions shall be assigned to the Division of Resource Management".

6. All such state lands determined not to be necessary for recreation, wildlife or environmental preservation be sold at public sale to the highest bidder and the funds derived be refunded to the counties involved on a prorata basis in the manner established by the tax monies furnished by these counties for the Cross Florida Canal Navigation District. The total monies refunded to the various counties are to be calculated by converting the actual amount furnished to its present dollar value giving the effect of interest charged at average market rates being compounded annually over the total period of financial commitment. Should the funds so derived be in excess, any surplus will be returned to the different counties on a prorata basis. Should the funds so derived be insufficient, the Governor and Cabinet, sitting

as Head of the Department of Natural Resources, recommend to the Florida Legislature that they appropriate sufficient funds to fulfill this obligation.

C. The Governor and Cabinet, sitting as Head of the Department of Natural Resources, direct the staff of the Department of Natural Resources, upon approval and implementation of "B.5", to prepare any additional legislative recommendations for use or disposition of resources and facilities of the project consistent with the above recommendations.

DONE AND EXECUTED at Tallahassee, Florida, this 17th day of January, 1977, A. D.

Reubin O'D Askew
Governor

Bruce A Smathers
Secretary of State

[illegible] L. Shevin
Attorney General

Gerald A Lewis
Comptroller

Bill Gunter
Treasurer

Commissioner of Agriculture

Ralph D. Turlington
Commissioner of Education

As and Constituting the Head of the State of Florida Department of Natural Resources.

ATTEST:

Mary C. Nouah
Secretary

RESOLUTION 83-4

OPPOSITION TO HOUSE BILL HR 2695 AND SENATE COMPANION BILL

WHEREAS, The Withlacoochee Regional Planning Council's adopted Regional Land Use Plan states that the Council shall strive to obtain the best possible physical, social and economic conditions for the region and its residents through the planned use and development of land, buildings, the transportation network, and public facilities; and,

WHEREAS, it is the policy of the Withlacoochee Regional Planning Council to promote a balance of growth throughout the region while providing the necessary public services and facilities to support growth; and,

WHEREAS, the Cross-Florida Barge Canal Project is currently under study by the U.S. Army Corps of Engineers as authorized by the United States Congress; and,

WHEREAS, it is recognized that an updated economic and environmental feasibility study of the Cross-Florida Barge Canal Project is needed to facilitate well informed decision-making on the project; and,

WHEREAS, the proposed House Bill HR 2695 and Senate Companion Bill will officially deauthorize the Cross-Florida Barge Canal Project if enacted;

NOW, THEREFORE, BE IT RESOLVED, that the Withlacoochee Regional Planning Council opposes House Bill HR 2695 and Senate Companion Bill to deauthorize the Cross-Florida Barge Canal prior to completion of the economic and environmental evaluation by the U.S. Army Corps of Engineers; and

BE IT FURTHER RESOLVED, that copies of this resolution be transmitted to the Region's Congressional Delegation, the Chairman of the House Appropriations Committee, the Chairman of the Armed Services Committee, the Chairman of the Public Works and Transportation Committee, the Chairman of the Science and Technology Committee, the Chairman of the House Ways and Means Committee, and to the Chairmen of the appropriate Senate Committees.

Wilbur H. Langley, Sr.
Chairman

ATTEST:
James D. Mims
Executive Director

The above resolution was approved by the majority vote of the Council, this [illegible]th day of May, 1983.

RESOLUTION NO. 83-R-75

WHEREAS, the Cross Florida Barge Canal from the Saint Johns River across Florida to the Gulf of Mexico was authorized by the Act of July 23, 1942 (56 Stat. 703).

WHEREAS, President Richard M. Nixon ordered a halt to construction of the canal project in 1971 due to potential environmental and economic problems.

WHEREAS, in 1982 Congress authorized a restudy by the Corp of Engineers to determine whether or not the Cross Florida Barge Canal project is economically feasible.

WHEREAS, Congressman Buddy MacKay has introduced House Bill 2695 which proposes to deauthorize the Cross Florida Barge Canal project.

WHEREAS, the Board of County Commissioners of Marion County, Florida is in opposition to House Bill 2695 as it pertains to deauthorization of the Cross Florida Barge Canal project, as the Board feels that the above mentioned study authorized last year should be completed and further feels that the canal deauthorization may have adverse effect on Lake Ocklawaha and flood control in Marion County.

WHEREAS, the Board of County Commissioners of Marion County, Florida desires by means of this Resolution to express its opposition to the deauthorization of the Cross Florida Barge Canal project as proposed by House Bill 2695 and to further request that Congress retain land and public works that are a part of the Cross Florida Barge Canal project.

NOW THEREFORE, for and in consideration of the mutual terms, covenant and conditions herein contained to be complied with by the parties hereto contract and agree as follows:

1. That the Board of County Commissioners of Marion County, Florida is in opposition to the deauthorization of the Cross Florida Barge Canal due to its potential effect on Lake Ocklawaha and flood control in Marion County and due to the fact the study on the economic feasibility of the Cross Florida Barge Canal as authorized in 1982 by Congress has not been completed.

2. That the Board of County Commissioners of Marion County, Florida urges Congress to vote against House Bill 2695.

3. That the Board of County Commissioners of Marion County, Florida urges Congress to retain public works and lands that are part of the Cross Florida Barge Canal project.

4. That copies of this Resolution shall be furnished to the members of the State of Florida Congressional Delegation.

PASSED AND RESOLVED this 10th day of May, 1983

BOARD OF COUNTY COMMISSIONERS
MARION COUNTY, FLORIDA

Roy E. Abshier
Roy E. Abshier, Chairman

ATTEST:

Frances E. Thigpen
Frances E. Thigpin, Clerk

OFFICE OF CITY COUNCIL

HENRY COOK
PRESIDENT 1982-1983
COUNCILMAN AT LARGE
(904) 633 3680

220 E. BAY STREET
JACKSONVILLE, FLORIDA
32202

May 13, 1983

The Honorable Charles E. Bennett
Member of Congress
2107 Rayburn House Office Building
Washington, D.C. 20515

Dear Charlie:

Thank you for your letter of May 6th requesting the position of the Jacksonville City Council on the Cross Florida Barge Canal. The Council has consistantly and actively supported the Barge Canal ever since funds were illegally frozen by a previous administration. Most recently the Council passed a Resolution supporting the re-establishment of the Cross-Florida Canal Counties Association which held an organizational meeting in my office. The meeting was well attended by a cross-section of the Jacksonville business community. Among those present were Lance Ringhaver of Ring Power, Hal Jones, Jr., of Wood Hopkins Contracting, Paul McCormick of the Jacksonville Area Chamber of Commerce, Gary Loveless with the Northeast Florida Chapter of the Associated General Contractors, former State Representative Andy Johnson who now is active in the Coalition for Rational Energy and Economic Development (CREED), which supports completion of the canal; representatives from the Northeast Florida Builder's Association, and Councilman Jim Wells and myself. As you can see there is a rather broad based support here for completion of the Canal. In another action, the City Council placed $25,000 in a reserve fund for future use by the Cross-Florida Canal Counties Association provided the other counties make a similar contribution in proportion to their population.

We agree wholeheartedly that a new economic feasibility study, particularly one that would consider the advantages of barging coal (which, understandably, were not considered in the 1977 study) to the Seminole Electric plant north of Palatka and the St. Johns River Power Park here in Jacksonville, will put a whole new face on the benefit cost ratio of the canal.

Further, I am more than willing to appear as a witness in opposition to deauthorization and I feel certain that all of the persons and organizations I referred to previously would also be willing to testify.

Also, please find enclosed copies of the previously mentioned legislation from the Jacksonville City Council in support of the Cross Florida Barge Canal. Please let me know if I or any member of the City Council can be of any further assistance in this issue.

Sincerely,

Henry

Henry Cook
President
City Council

HC/sn

Enclosure

AMENDED 4/27/82

Introduced by Councilman Wells:

ORDINANCE 82-58-126

AN ORDINANCE CONCERNING THE FLORIDA CROSS-STATE CANAL; EXPRESSING THE CONTINUED SUPPORT OF THE COUNCIL FOR THE CONSTRUCTION AND COMPLETION OF THE CANAL; APPROPRIATING $25,000 FROM COUNCIL OPERATING RESERVE TO SPECIAL COUNCIL RESERVES FOR FUTURE USE BY THE CROSS-FLORIDA CANAL COUNTIES ASSOCIATION TO ASSIST ITS OBJECTIVES AND PURPOSES, SUBJECT TO CERTAIN CONDITIONS; PROVIDING AN EFFECTIVE DATE.

WHEREAS, the Council has, by Resolution 76-912-237 and Resolution 79-1011-250 and other sundry resolutions, expressed its support for the construction and completion of the Florida Cross-State Canal, recognizing its commercial and industrial importance to the City from the water-borne traffic that will pass through the Canal; and

WHEREAS, the Cross-Florida Canal Counties Association, an unincorporated association of individuals representing the counties through which the Canal crosses, is extremely active in working for the construction and completion of the Canal and is diligently pursuing this objective with the State and federal authorities responsible for the continuation of the work on the Canal; and

WHEREAS, the Council, wishing to continue the support expressed in the aforementioned resolutions, envisages that the Association, if appropriately supported, would fulfill a public purpose in working toward the completion and opening of the Canal to public traffic; now, therefore

BE IT ORDAINED by the Council of the City of Jacksonville:

Section 1. The Council continues its support for the construction and completion of the Florida Cross-State Canal, as previously expressed in Resolution 76-912-237 and Resolution 79-1011-250, and considers that the Cross-Florida Canal Counties Association fulfills a public purpose in its objectives and purposes and is deserving of public support. The Council calls upon the other counties through which the Canal would pass to express similar support and take similar action.

Section 2. There is hereby appropriated from Council Operating Reserve Account No. 112-7161556 the sum of $25,000 to Special Council Reserves Account No. 112-7166678 until such time as further appropriated by Council for use by the Cross-Florida Canal Counties Association to assist in implementing its objectives and purposes.

Section 3. This ordinance shall become effective upon signature by the Mayor or upon becoming effective without the Mayor's signature.

Form Approved:

Phillip S. Capo

Assistant Counsel

General Counsel

ORDINANCE 82-58-126

CERTIFICATE OF AUTHENTICATION

ENACTED BY THE COUNCIL

April 27, 1982

Joe Forshee

JOE FORSHEE,
COUNCIL PRESIDENT

ATTEST:

Ronald R. Johnson

RONALD R. JOHNSON
SECRETARY TO THE COUNCIL

APPROVED May 4, 1982

JAKE M. GODBOLD, MAYOR

Introduced by the Committee on Rules:

RESOLUTION 82-413-112

A RESOLUTION URGING AND SUPPORTING THE REESTABLISHMENT OF THE CROSS-FLORIDA CANAL COUNTIES ASSOCIATION (CFCCA) AND INVITING THE OTHER COUNTIES THROUGH WHICH THE CANAL CROSSES TO JOIN WITH THE CITY OF JACKSONVILLE AT AN ORGANIZATIONAL MEETING TO AGAIN ORGANIZE THE CFCCA INTO AN EFFECTIVE ASSOCIATION DEDICATED TO THE COMPLETION OF THE CROSS-FLORIDA BARGE CANAL; PROVIDING AN EFFECTIVE DATE.

WHEREAS, the Cross-Florida Barge Canal construction has now been stopped since 1971, after having been completed to a thirty-five percent level; and

WHEREAS, exhaustive studies have clearly defined the positive benefits of the Canal offering new jobs, reduced transportation costs, energy conservation and recreation opportunities; and

WHEREAS, with the construction of coal fired generating plants in North Florida already underway and with additional units planned, the benefit to cost ratio will dramatically illustrate the need for completion of the project; and

WHEREAS, since thirty-five percent of the project has already been completed and the original environmental concerns which were expressed have proven to be unfounded; and

WHEREAS, in addition to the economic advantages which will be derived from the completion of the Cross-Florida Barge Canal environmental studies have shown that the project will result in a recharging of the acquifer improving our environment and protecting a critical natural resource; and

WHEREAS, the Council has, by Resolution 76-912-237 and Resolution 79-1011-250 and other sundry resolutions, expressed its support for the construction and completion of the Florida Cross-State Canal, recognizing its commercial and industrial importance to the City as well as other Florida cities from the water-borne traffic that will pass through the Canal; and

WHEREAS, the Cross-Florida Canal Counties Association (CFCCA), an unincorporated association of individuals representing the counties through which the Canal crosses, was extremely active in working for the construction and completion of the Canal and could diligently pursue this objective with the State and federal authorities responsible for the continuation of the work on the Canal; and

WHEREAS, the Council, wishing to continue the support expressed in the aforementioned resolutions, envisages that the CFCCA if re-established and jointly supported, would fulfill a public purpose in working toward the completion and opening of the Canal to public traffic; now, therefore

BE IT RESOLVED by the Council of the City of Jacksonville:

Section 1. The Council hereby urges and supports the re-establishment of the Cross-Florida Canal Counties Association (CFCCA) and pledges its cooperation with all public and private entities also interested in such re-establishment. The Council further invites all the other counties through which the canal passes to join with the City of Jacksonville to again organize the CFCCA into an effective association dedicated to completion of the Cross-Florida Barge Canal. The Council further requests the Council President to call an organizational meeting of the CFCCA prior to September 1, 1982.

Section 2. This resolution shall become effective upon signature by the Mayor or upon becoming effective without the Mayor's signature.

FORM APPROVED:

Phillip S. Cope
Assistant Counsel

Dawson A. McQuaig
General Counsel

RESOLUTION 82-413-112

CERTIFICATE OF AUTHENTICATION

DECLARED AN EMERGENCY MEASURE AND
ADOPTED BY THE COUNCIL

April 27, 1982

Joe Forshee

JOE FORSHEE,
COUNCIL PRESIDENT

ATTEST:

Ronald R. Johnson

RONALD R. JOHNSON
SECRETARY TO THE COUNCIL

APPROVED May 4, 1982

JAKE M. GODBOLD, MAYOR

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0131P EST 13:32 EST

western union Telegram

REPRESENTATIVE CHARLES BENNETT
CAPITOL ONE DC

THE JBR STRONGLY REQUESTS THE CROSS-FLA BARGE CANAL NOT BE KILLED UNTIL THE CURRENT STUDY IS FINISHED AND DISCUSSED. THE JBR SINCERELY APPRECIATES YOUR CONTINUED LEADERSHIP ON THIS ISSUE

SINCERELY
CLAUDE A SAMS PRESIDENT JACKSONVILLE BOARD OF REALTORS
3949 ATLANTIC BLVD
JACKSONVILLE FL 32207

13:32 EST

IPMPOMX WSH

PUTNAM COUNTY
P.O. BOX 758
PALATKA, FLORIDA 32078-0758

BOARD OF COUNTY COMMISSIONERS
J.W. "BONNIE" ALLENDER, GEORGETOWN, DISTRICT 1
JOHN EUBANKS, PALATKA, DISTRICT 2
CHARLES R. BAIRD, SAN MATEO, DISTRICT 3
C. WARD HANCOCK, WEST RIVER RD., DISTRICT 4
KELLEY SMITH, JR., PALATKA, DISTRICT 5

May 11, 1983

Honorable Charles E. Bennett
2107 Rayburn
House Office Building
Washington, D.C. 20515

Dear Congressman Bennett:

The Board of County Commissioners, Putnam County, Florida, in meeting assembled on the 10th day of May, 1983, adopted the enclosed Resolution opposing the deauthorization of the Cross Florida Barge Canal, as it would be a disservice to the citizens of Putnam County and, in fact, the nation.

Your support and consideration of this matter will be greatly appreciated.

Sincerely,

BOARD OF COUNTY COMMISSIONERS
PUTNAM COUNTY, FLORIDA

By J.W. "Bonnie" Allender
Chairman

BCC/JWA/smb

Enclosure

RESOLUTION
OF
BOARD OF COUNTY COMMISSIONERS
PUTNAM COUNTY, FLORIDA

WHEREAS, the Cross Florida Barge Canal was begun with great promise in Florida in 1964, and

WHEREAS, when the project was approximately thirty-five percent (35%) complete, the President of the United States stopped the project in 1971, and

WHEREAS, since that time a definitive and comprehensive Economic and Environmental Impact Study of the project has been conducted, and

WHEREAS, the State of Florida has not seen fit to ask for additional funds to further pursue the Barge Canal project, and

WHEREAS, a congressionally mandated Economic Restudy of the canal project is now in progress by the U. S. Army Corps of Engineers, and

WHEREAS, Congressman Buddy MacKay and Senator Lawton Chiles have seen fit to file bills in the congress during this session to deauthorize the Cross Florida Barge Canal project, and

WHEREAS, this deauthorization finally visualizes the destruction of the facilities which have been created as part of the canal, and

WHEREAS, such destruction would be a disservice to the people of Putnam County, Northeast Florida and, in fact, the nation.

NOW, THEREFORE, BE IT RESOLVED, by the Putnam County Board of County Commissioners, in meeting assembled on the 10th day of May, A.D. 1983, that the Cross Florida Barge Canal not be deauthorized at this time and no further action be taken on this project until the results of the Economic Restudy now underway are known.

BE IT FURTHER RESOLVED that copies of this Resolution be provided to Congressman Buddy MacKay, Senator Lawton Chiles, and other members of the Florida Congressional Delegation, as well as Committee Chairmen of key committees in the House and Senate concerned with the Cross Florida Barge Canal project.

BOARD OF COUNTY COMMISSIONERS
PUTNAM COUNTY, FLORIDA

(SEAL)

By: J. W. "Bonnie" Allen
Chairman

ATTEST:

Clerk, Circuit Court

STATEMENT OF EDGAR LEO JOHNSON

PROJECTS CONSULTANT FOR FLORIDA WATERWAYS ASSOCIATION, INC.

SENATE BILL 1131 AND HOUSE BILL 2695, TO DEAUTHORIZE THE CROSS-FLORIDA BARGE CANAL

THE FIRST PART OF MY STATEMENT IS MADE ON BEHALF OF THE WITHLACOOCHEE REGIONAL PLANNING COUNCIL, PLANNING AGENCY FOR CITRUS, HERNANDO, LEVY, MARION, AND SUMTER COUNTIES, AND ON BEHALF OF THE COUNTY COMMISSIONS OF MARION, CITRUS AND PUTNAM COUNTIES, THE JACKSONVILLE PORT AUTHORITY, FLORIDA VOTERS LEAGUE, INC., AND FLORIDA WATERWAYS ASSOCIATION, INC. THESE ARE OPPONENTS OF THE DEAUTHORIZATION BILLS BECAUSE THEY ARE CONVINCED THAT THE STUDY OF THE PROJECT RECENTLY BEGUN BY THE U.S. ARMY CORPS OF ENGINEERS, SHOULD BE COMPLETED AND ASSESSED BY ALL LEVELS OF GOVERNMENT BEFORE ANY CONSIDERATION CAN POSSIBLY BE GIVEN TO DEAUTHORIZING THE PROJECT. IN OTHER WORDS, THE TIMING IS WRONG; THESE BILLS SEEK TO "PUT THE CART BEFORE THE HORSE." TO DO THIS WOULD BE TO "THROW THE BABY OUT WITH THE BATH WATER."

THERE ARE SERIOUS FLOOD CONTROL PROBLEMS WHICH ARE ADDRESSED BY THE PLANS FOR THIS PROJECT, BUT WOULD BE LEFT "HANGING" IF THESE BILLS BECOME LAW. THE SAME APPLIES TO THE WATER CONSERVATION AND PUBLIC RECREATION ASPECTS OF THE PROJECT, ALTHOUGH AN INSUFFICIENT ATTEMPT IS MADE BY THE BILLS TO PRESERVE THE PUBLIC RECREATIONAL ASPECTS. THE HUGE POTENTIAL FOR MEETING THE GROWING NEED OF PUBLIC WATER SUPPLY FOR FLORIDA'S EXPANDING POPULATION, PARTICULARLY IN THE NEARBY ORLANDO, TAMPA AND ST. PETERSBURG AREAS WOULD PROBABLY BE "FLUSHED DOWN THE DRAIN" IF THE NEGATIVE ACTION OF DEAUTHORIZATION OCCURS; THIS AND OTHER WATER CONSERVATION ASPECTS OF THE PROJECT ARE APPARENTLY IGNORED BY PROPONENTS OF DEAUTHORIZATION.

LOCAL GOVERNMENT CONCERNS ALSO INVOLVE ZONING REGULATIONS, ADEQUATE PLANNING FOR POPULATION GROWTH, AND ATTENDANT PROBLEMS. THESE SHOULD BE ADDRESSED IN LOCAL HEARINGS BEFORE DEAUTHORIZATION. ONE OF THE PROBLEMS IS THAT THE FLORIDA STATUTE WHICH ADDRESSES THE SUBJECT OF WHAT TO DO WITH RIGHTS-OF-WAY ALLOWS PREVIOUS OWNERS FIRST RIGHTS TO REPURCHASE THE PROPERTY WHICH HAD BEEN THEIRS. LOCAL AREA GOVERNMENTS SHOULD HAVE FIRST OPTIONS TO ACQUIRE THESE LANDS; OTHERWISE, THE NEED TO AGAIN ACQUIRE PROPERTY FOR PUBLIC PURPOSES UNDER THE RIGHT OF EMINENT DOMAIN COULD RESULT IN FINANCIAL LOSS BY THE LOCAL GOVERNMENTS INVOLVED IF FLOOD CONTROL AND WATER CONSERVATION NEEDS OF THE PRESENT AND FUTURE ARE NOT MET. THERE IS NO REAL ASSURANCE IN THESE BILLS FOR PRESERVING LAKE OKLAWAHA OR THE WITHLACOOCHEE RIVER "BACKWATER." THIS ASSURANCE AND ADEQUATE CONSIDERATION FOR LOCAL GOVERNMENT PROBLEMS ASSOCIATED WITH DEAUTHORIZATION SHOULD BE WRITTEN "IN CONCRETE" BEFORE ANY DEAUTHORIZATION, AND THE TIME FOR THIS SHOULD BE AFTER COMPLETION OF THE CURRENT STUDY SHOWS THE PROJECT TO BE NOT FEASIBLE. WHY NOT MAKE CERTAIN THAT THE ANSWERS TO THESE AND OTHER QUESTIONS ARE MADE AVAILABLE BY COMPLETING ALL ASPECTS OF THE STUDY, FIRST?

IN ADDITION TO THE POINTS MADE ABOVE THOSE WHO AFFIRMATIVELY SUPPORT COMPLETION OF THE PROJECT FOR ALL PURPOSES, INCLUDING NAVIGATION, INCLUDE THE PUTNAM COUNTY COMMISSION, THE JACKSONVILLE PORT AUTHORITY, FLORIDA VOTERS LEAGUE, INC., AND FLORIDA WATERWAYS ASSOCIATION, INC.. THIS PROJECT MAKES POSSIBLE TREMENDOUS SAVINGS IN BULK TRANSPORTATION BY CONNECTION OF THE TWO LARGEST PARTS OF OUR NATIONAL SYSTEM OF NAVIGABLE WATERWAYS. HERE COULD BE JOINED THE ATLANTIC INTRA-COASTAL WATERWAY AND GULF INTRA-COASTAL WATERWAY, WHICH IS ALREADY INTEGRATED WITH THE GREAT MISSISSIPPI RIVER SYSTEM OF WATERWAYS. AND SOON, IN JUST A LITTLE OVER TWO YEARS, THE TENNESSEE-TOMBIGBEE WATERWAY WILL BE COMPLETED; WHEN THAT HAPPENS, APPROXIMATELY 700 MILES WILL BE SAVED IN TRANSPORTATION BETWEEN CAIRO, ILLINOIS, WHERE THE OHIO AND MISSISSIPPI RIVERS JOIN, TO MOBILE, ALABAMA, WHICH IS "JUST DOWN THE STREET" FROM FLORIDA. THE BIGGEST ECONOMIC DIFFERENCE, WHICH HAS BEEN THRUST UPON US BY OPEC, IS THAT THE ELECTRIC UTILITIES IN FLORIDA ARE RAPIDLY TURNING TO COAL AND AWAY FROM PETROLEUM AS FUEL TO GENERATE ELECTRICITY. AT ONE PLANT ALONE THE SAVINGS IN TRANSPORTATION COSTS THAT WOULD FOLLOW FROM COMPLETION OF THE BARGE CANAL ARE ESTIMATED TO EXCEED $10 MILLION EVERY YEAR; THAT PLANT IS SEMINOLE ELECTRIC COOPERATIVE PLANT AT PALATKA. THE SAVINGS POSSIBLE AT THE PLANNED NEW PLANT OF JACKSONVILLE ELECTRIC AUTHORITY AND FLORIDA POWER AND LIGHT COMPANY, AT JACKSONVILLE, SHOULD BE SIMILAR.

COMPLETION OF OUR NATIONAL WATERWAYS SYSTEM WILL MAKE IT POSSIBLE FOR ALMOST ANYONE TO TRAVEL BY WATER FROM MINNEAPOLIS TO MIAMI, AND FROM NATCHEZ TO NORFOLK, AND FROM CORPUS CHRISTI TO CHARLESTON, IN SMALL BOATS SAFELY, STOPPING AT BOATELS ALONG THE WAY.

THE NORTHEAST FLORIDA BUILDING AND TRADES COUNCIL HAS ASKED ME TO STATE THAT THEY SUPPORT COMPLETION OF THE BARGE CANAL.

OFTEN OVERLOOKED IS THE NATIONAL DEFENSE ASPECT OF THIS PROJECT. YOU KNOW, KEY WEST, FLORIDA, IS ONLY ABOUT 90 MILES FROM CUBA, AND MILLIONS OF TONS OF SHIPPING TRAVERSE THAT STRETCH OF WATER REGULARLY. SOME PEOPLE SAY THAT CUBA PRESENTS THE GRAVEST THREAT TO OUR SECURITY. MANY SHIPS WERE SUNK BY GERMAN SUBMARINES OFF THE COAST OF FLORIDA DURING WORLD WAR II, AND MANY OTHERS HAVE BEEN LOST OVER THE YEARS AS A RESULT OF HURRICANES. THE PROSPECTS OF FUTURE LOSSES FROM WAR OR WEATHER COULD BE DRASTICALLY REDUCED BY COMPLETION OF OUR WATERWAY SYSTEM.

A MYTH HAS BEEN CREATED BY THOSE WHO HAVE SAID THAT THE MAJOR SOURCE OF FLORIDA'S FRESH WATER, THE FLORIDA AQUIFER, WOULD BE DAMAGED BY THIS PROJECT. THIS MYTH IS NOT SUPPORTED BY THE FACTS. THE CORPS OF ENGINEERS SAY THAT THERE ARE ADEQUATE SAFEGUARDS TO PREVENT DAMAGE TO THE WATER SUPPLY. IF THERE ARE QUESTIONS OR PROBLEMS, THE PROPER APPROACH IS TO FIND THE ANSWERS TO ANY SUCH QUESTIONS OR PROBLEMS; THE WRONG APPROACH IS TO DROP THE PROJECT, LIKE MR. NIXON DID IN 1971. THE COURT DECIDED THAT MR. NIXON WAS WRONG IN THAT DECISION; LET'S NOT REINFORCE MR. NIXON'S WRONG DECISION NOW BY DEAUTHORIZING THE PROJECT BEFORE THE CURRENT STUDY IS FINISHED. ARE THE PROPONENTS OF DEAUTHORIZATION FEARFUL THAT THE STUDY WILL INDICATE THE PROJECT IS ECONOMICALLY AND ENVIRONMENTALLY SOUND? HASTE MAKES WASTE. WE SAY TO KEEP THE HORSE IN FRONT OF THE CART, AND FINISH AND REVIEW THE STUDY BEFORE OTHER ACTION IS TAKEN.

FLORIDA DEFENDERS OF THE ENVIRONMENT, INC.
626 North Main Street
Gainesville, Florida 32601 **904-372-6965**

May 20, 1983

Senator James Abdnor, Chairman
Subcommittee on Water Resources
Committee on Environment and Public Works
Hart Building, Suite 309
Washington, D.C. 20510

Re: Cross Florida Barge Canal

Dear Senator Abdnor:

Florida Defenders of the Environment recommends deauthorization of the Cross Florida Barge Canal (C.F.B.C.) project as soon as possible.

This public works project, never very popular with the U.S. Congress (it was approved by a 1 vote margin in 1942), has been rejected by President Nixon, President Carter, Florida Governor Reubin Askew and Governor Bob Graham, the Florida Cabinet, the State Legislature and a majority of the Florida Congressional Delegation. It is clear that the elected officials representing the Florida public definitely want to terminate this project. Florida does not want a Cross Florida Barge Canal.

The reasons why the people of Florida want this project deauthorized may be summarized as follows:

Construction of the Cross Florida Barge Canal poses a pollution threat to the Floridan Aquifer and to the surface waters in the Ocala/Silver Springs area.

The environmental threat that has caused the widest concern is the 28-mile-long ditch that would have been dug down into the water-bearing rocks--the Floridan Aquifer--of Central Florida from about Dunnellon across to Ocala. According to the design of the canal, it is essential to have the bottom of the canal 12 to 15 feet below the water table in that area. The canal is designed to have free interchange between the aquifer and the canal waters, and indeed the barges would float on water of the aquifer. The danger of this plan lies in the fact that the limerock in this area is honeycombed with solution channels of all sizes, from small tubes to great caverns. While the limerock in the region of the canal channel has been found to be quite dense, it also has been found to have innumerable vertical chimneys that extend down to more permeable layers of limerock. Here lateral solution channels develop that may enlarge into immense underground caverns in unpredictable places and numbers.

Because of this structure of the bedrock, pollutants introduced into the canal waters would move quickly, and with relatively little dilution, quite possibly reaching nearby springs and wells, whenever sizable solution channels are encountered. The well field for the City of Ocala, the second fastest growing city in Florida, is within a few miles of the canal, and numerous thoroughbred horse farms in the area are dependent on clean well water. Moreover, the flow of underground water in the eastern end of the Summit Reach leads toward Silver Springs.

One of the professional hydrologists opposing construction of the canal is Garard G. Parker, Sr., whose career includes 30 years with the U.S. Geological Survey. In his testimony before the Governor and Cabinet on December 17, 1976, Mr. Parker said, " I deplore the proposed construction of the Cross Florida Barge Canal in the unfinished Summit Reach because I believe that it's going to be a disaster for this area, chiefly caused by expected pollution of the regional groundwater supply in the Floridan Aquifer."

The Cross Florida Barge Canal would use, not conserve water and would compete for water with more important uses (human drinking, agriculture, industry).

The canal project would not create additional water for water supply development in Florida. On the contrary, the project ties up vast quantities of water--both surface and groundwater--to maintain the operational viability of the project.

Operation of the canal locks would have substantial immediate and long-term adverse impacts upon present water users such as municipalities and agriculture, and will preempt future uses of the water in this rapidly developing part of Florida. In times of drought the problems would be exacerbated. It should be noted that the drought of 1980-81 has already caused a drop of some water levels in the canal area below the minimum level needed for floating barges.

The shallow reservoirs are not located in a region of aquifer recharge but instead in an outflow zone. Over 20 springs are found in the Oklawaha Valley in the canal area. Because the reservoirs act as evaporation pans, there is a small net loss of water in this area.

Construction of the Cross Florida Barge Canal would adversely affect endangered and threatened species of animals including manatees.

The Oklawaha and Withlacoochee Rivers have already been damaged by canal construction. If the project was completed, much of the remaining Oklawaha river valley forest would be destroyed, the river would be severely impacted, and the wildlife would suffer. Thousands of acres of scarce forest types would be lost, including the habitat of several species of Endangered and Threatened plants. Most of the benefits to wildlife claimed for canal construction would be minor, temporary, and chiefly to common species. The harmful effects, however, would generally be of major importance, permanent, and would affect more Endangered and Threatened species. Many terrestrial animals, including ten Endangered and Threatened species would permanently lose large areas of scarce river forest habitat. Even many aquatic and water-associated species would lose more from canal construction in the long run than they would gain. Some species of birds would gain temporary benefits from flooded tree habitats in the new reservoirs, but when the trees fell these birds would end up with less habitat than before the canal was built. Eagles and ospreys would gain non-critical feeding habitat, but would lose potential nesting habitat. The Endangered manatee would inevitably suffer increased losses through collisions with boats and barges and from being crushed in the locks. Critical habitat for the manatee has been declared close to both the east and west ends of the canal.

The Cross Florida Barge Canal project is a waste of taxpayers' money. The cost of completing the Cross Florida Barge Canal at 1982 price levels is $474 million. At current discount rates for public works projects the canal would cost far more than it would produce in benefits. The benefit/cost ratio at current discount rates would be about .50-1.

Delay in deauthorization wastes money and resources

Every year since the canal was halted in 1971 the Corps of Engineers (COE) has spent an increasing amount on annual maintenance for the partially built canal. In 1981 the Corps of Engineers spent $1.6 million of taxpayers' money on maintenance and operation.

The State is unable to use the thousands of acres of land that it bought for canal right-of-way. These idle lands could serve a multitude of public and private purposes such as parks, forests, agriculture and sites for public facilities and a hydropower plant.

The six counties that contributed tax money to purchase the canal right-of-way cannot receive repayment until after deauthorization.

Delay in deauthorization will increase the likelihood of extended lawsuits. These suits could result in the loss to the Florida public of beautiful natural areas that should be kept in the public domain as part of the Ocala National Forest.

For these reasons we urge your prompt and favorable action on S. 1131.

Senator James Abdnor
Page 4
May 20, 1983

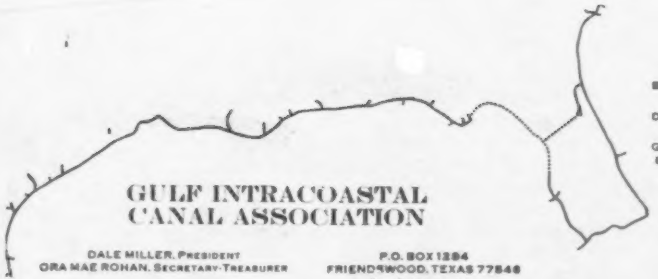
Thank you for your consideration and please include this letter in the record.

Sincerely,

Marjorie H. Carr

Marjorie H. Carr
President

MHC:gsb



GULF INTRACOASTAL
CANAL ASSOCIATION

DALE MILLER, PRESIDENT
ORA MAE ROHAN, SECRETARY-TREASURER

P.O. BOX 1284
FRIENDSWOOD, TEXAS 77546
(713) 996-9322

BAILEY T. DEBARDELEBEN, VICE-PRESIDENT
NEW ORLEANS, LOUISIANA
DUANE ORR, VICE-PRESIDENT
CORPUS CHRISTI, TEXAS
G. J. "MITCH" MICHELETTI
EXECUTIVE VICE-PRESIDENT
DICKINSON, TEXAS

ORGANIZED AT
VICTORIA, TEXAS
AUGUST 8, 1905

Statement of Dale Miller
President of the Gulf Intracoastal Canal Association
Submitted to the Subcommittee on Water Resources of the
Senate Committee on Environment and Public Works
May 19, 1983

Mr. Chairman and Members of the Subcommittee:

My name is Dale Miller, and I am President of the Gulf Intracoastal Canal Association, with principal offices in Friendswood, Texas. It is my privilege to submit to you this statement expressing the opposition of our organization to S. 1131, the bill to de-authorize the Cross-Florida Barge Canal.

Our Association was organized 78 years ago, in 1905, and through the years it has cooperated actively with Congress and Government agencies in the creation of the Gulf Intracoastal Waterway system, a complex of navigation facilities that has come to be regarded as the most remarkable artery of transportation in America. It has achieved by far the highest ratio of benefits-to-costs of any waterway in the nation -- or of any other form of transportation. Its annual commerce of nearly 100,000,000 tons exceeds by almost twenty times the figure of five million tons which was originally predicted when it was authorized.

The main channel of the Gulf Intracoastal Waterway extends today approximately 1,200 miles from the Mexican border to the east coast of Florida, and it is a significant fact -- especially pertinent to these hearings -- that a similar navigation facility, the Atlantic Intracoastal Waterway, extends a similar distance, with similar dimensions of depth and bottom width, from the east coast of Florida to the northeastern section of the United States.

Taken together, therefore, these two waterways would constitute a single entity extending 2,500 miles along the Gulf and Atlantic coasts -- a remarkable navigation facility unexampled throughout the world. But they cannot be "taken together", of course, because midway along the system is the missing connection -- the Cross-Florida Barge Canal, which is clearly needed in the national interest.

"FROM MAINE TO MEXICO"
A NATIONAL TRANSPORTATION FACILITY

CONNECTING THE GULF COAST WITH THE MID-CONTINENT VIA THE MISSISSIPPI AND ITS TRIBUTARIES, AND WITH
THE ATLANTIC SEABOARD VIA THE CROSS-FLORIDA BARGE CANAL

So I respectfully suggest to you -- and this fact underlies the entire problem -- that although the project itself is confined to a single State it is by no means an isolated or provincial facility. It is important to distant Texas -- indeed, even to the neighboring nation of Mexico -- and important as well to States along the eastern seaboard of the United States, reaching as far north as New Jersey. And even more, by the connections of the Gulf Intracoastal Waterway with the vast Mississippi and Ohio River systems, the project is important all across the nation's heartland -- an integral part of a national transportation system.

So I urge you to place this problem in the perspective that it fully deserves. It is a project that does not belong to Florida alone. It belongs as well to most of the United States, from the Gulf of Mexico to the Great Lakes, and from the Rocky Mountains to the Atlantic. That is why I feel no sense of presumptuousness in expressing the opposition of our Association to the deauthorization of this project.

The Cross-Florida Barge Canal has been beset for years by the opposition of environmental and ecological groups. We think those objections are virtually without merit, and we speak confidently from our own long experience. We constructed the Gulf Intracoastal Waterway over a long period of years, for more than a thousand miles, and we dredged it inshore and offshore, across bays and rivers, through lagoons and bayous and estuaries and mudflats and marshlands -- and today, as it moves north and then east from the border of Mexico, it parallels the Padre Island National Seashore for a hundred miles. It crosses a corner of the refuge of the whooping cranes -- crosses busy ship channels thronged with fishing and shrimp boats, convoyed by ever-present porpoises. It penetrates the bayous of Louisiana, passing alongside game preserves and the habitat of exotic wildlife -- and on to the Gulf Isles of Florida.

That is the world of our Waterway. It is a commercial enterprise that beggars description, yet it was accomplished in harmony with the environment. We have learned that progress and preservation can, and do, co-exist together.

We are resolutely confident that the Cross-Florida Barge Canal can achieve the same striking results -- enriching the economy without impairing the environment. In view of our long experience, it is difficult for us to believe that there are some intricate and mysterious ecological problems in that area that were not encountered, and successfully overcome, along a thousand heterogeneous miles to the west.

So we respectfully urge this Subcommittee to keep alive the opportunities and challenges which still lie ahead -- not to suffocate them by terminating the life of this project that is potentially so important to the economic well-being of our country.

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CONSERVATION IN ACTION
St. Petersburg Audubon Society, Inc.

13232 113th Avenue, N.
Largo, Florida 33544

May 15, 1983

Senator James Abdnor, Chairman
Environment & Public Works Subcommittee
United States Senate
Room SD - 410
Washington, D.C. 20510

Subject: Deauthorization of
the Cross-Florida Barge Canal
Senator Chiles bill - S. 1131

Dear Senator Abdnor,

I am writing on behalf of the St. Petersburg Audubon Society to express our support of Senator Lawton Chiles bill S. 1131 to deauthorize the Cross-Florida Barge Canal project.

Our reasons reflect those of all Florida citizens concerned with the very adverse environmental and economic factors associated with completing the canal, as follows:

1. Tremendous and wasteful public expense
2. Environmental damage; past, present and future
3. Destruction of the beautiful Oklawaha River and its forests
4. Cutting into the Floridan aquifer, polluting its regional ground water supply
5. No longer a need for transport as less expensive methods are now used.

Please include this letter in the hearing Record.

Sincerely,

Jane L. Olsen

Jane L. Olsen
Past President

the
WATERWAYS
JOURNAL
Weekly
SINCE 1887
314-241-7354

319 North Fourth St.
666 Security Bldg.
St. Louis, Mo. 63102

May 17, 1983

STATEMENT TO THE SENATE SUBCOMMITTEE ON WATER RESOURCES
ON BILL S. 1131 TO DEAUTHORIZE THE CROSS-FLORIDA BARGE CANAL

A book was recently published on the loss of American merchant ships during World War II.* It details the death of hundreds of seaman through drowning, burning to death and gradual and painful deaths through exposure. Many of these tragedies could have been avoided if petroleum and other war material from the Gulf coast, going to East coast ports, could have used an inland water route, including a canal across Florida.

Yet today, with the added risk of enemy submarines operating from Cuba, there is a bill before the Subcommittee to deauthorize the Cross-Florida Barge Canal . What a terrible consequence this lead to in time of war!

Before the Subcommittee takes action to deauthorize this project I would ask the members to consider these facts:

This is really a fight between interests in north and south Florida.

The stoppage of work on the Canal in the first place reflects a typical no-progess action on the part of environmentalists.

The stoppage was also a political move on the part of then-president Richard Nixon , by executive order, not Congressional action.

The Waterways Journal
St. Louis, Missouri

STATEMENT ON DEAUTHORIZING CROSS-FLORIDA BARGE CANAL

-2-

The action was funded the the railroads who did not want competition. It was railroad money, at least, that got the "ball rolling."

I believe this project is of such importance that if it is deauthorized the American people, whose money was used to start it, and who are and will be deprived of lower transportation costs if it is not completed, have every right to sue the opponents of the project to get their money back.

I respectfully ask the members of the Subcommittee to consider these statements when they act on S. 1131. Thank you for your kind consideration.

Respectfully,

James V. Swift,
Vice-President

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*"A Careless Word...A Needless Sinking," by Capt. Arthur R. Moore. Granite Hill Corp., Hallowell, ME.

98TH CONGRESS
1ST SESSION

S. 1131

To deauthorize the Cross-Florida Barge Canal project, to adjust the boundaries of the Ocala National Forest, Florida, and for other purposes.

IN THE SENATE OF THE UNITED STATES

APRIL 21 (legislative day, APRIL 18), 1983

Mr. CHILES introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works

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A BILL

To deauthorize the Cross-Florida Barge Canal project, to adjust the boundaries of the Ocala National Forest, Florida, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That (a) the high-level lock barge canal from the Saint Johns River across Florida to the Gulf of Mexico authorized by the Act of July 23, 1942 (56 Stat. 703), is not authorized after the date of enactment of this Act.

(b) The Secretary of the Army, acting through the Chief of Engineers, is authorized to operate and maintain the existing facilities (and lands appurtenant thereto) of the Cross-Florida Barge Canal project referred to in subsection (a) of this section in such manner as he determines to be necessary, pending further disposition by law of the project, its facilities, and lands.

SEC. 2. (a) The boundaries of the Ocala National Forest, Florida, are extended to include the lands north and west of the Oklawaha River as shown on the map dated July 1978, on file with the Chief of the Forest Service, Department of Agriculture, Washington, District of Columbia, and available to the public in the office of the appropriate regional forester, forest supervisor, or forest ranger.

(b) Within the boundaries of the Ocala National Forest, as extended by subsection (a) of this section, lands or interests in lands and improvements owned by the United States and administered by the Corps of Engineers, Department of the Army, shall be transferred to the Secretary of Agriculture to be administered and made a part of the Ocala National Forest, Florida, at such time as the Secretary of the Army deems such action to be appropriate, but not later than September 30, 1984, except that the Secretary of the Army, acting through the Chief of Engineers, shall operate and maintain the existing facilities of the Cross-Florida Barge Canal project referred to in the first section of this Act within the extended boundaries of the Ocala National Forest pending further disposition by law with respect to such facilities.

(c)(1) The Secretary of Agriculture shall acquire those lands and interests in lands held by the State of Florida within the boundaries of the Ocala National Forest, as extended by subsection (a) of this section, with donated or appropriated funds, by purchase or exchange. For acquisition of such lands or interests in lands, the Secretary of Agriculture—

(A) shall pay the State of Florida an amount, or

(B) in the case of exchange, give the State of Florida lands or interests in lands with a fair market value,

which is not less than the fair market value of the lands or interests in lands to be acquired from the State of Florida.

(2) There are authorized to be appropriated for fiscal year 1984 such sums as may be necessary to carry out the provisions of this subsection.

COST SHARING FOR WATER RESOURCE INVESTMENT

Senator Abdnor. Dr. Rivlin, we appreciate your being here. We had our problems yesterday trying to hold a hearing with nine back to back votes on the floor. So we are backed up a bit.

We do appreciate your coming, and we are anxious to hear your views on this very important subject and that comprehensive study.

STATEMENT OF ALICE M. RIVLIN, DIRECTOR, CONGRESSIONAL BUDGET OFFICE, ACCOMPANIED BY DAVID BODDE, ASSISTANT DIRECTOR, NATURAL RESOURCES AND COMMERCE

Ms. Rivlin. I am delighted to be here. I didn't mind waiting at all. I am always fascinated listening to the very difficult problems that have to be decided by this committee.

I have with me today, David Bodde, who is the head of our Natural Resources and Commerce Division.

We move from the particular problems of Florida and Pennsylvania to the more general issues before this committee—cost sharing for water resource investment.

Historically, of course, the Federal Government has assumed the predominant role in selecting and financing water projects, primarily to stimulate economic development. Indeed, Federal water projects have contributed greatly to industrial and agricultural expansion in much of the Nation. But, today, a combination of factors—achievement of many regional development goals, a recognition that most federally important water projects are now in place, and budgetary constraints at all levels of government—suggest rethinking the way water resource needs are met.

Cost sharing is a part of that reexamination, because a higher non-Federal share is likely to lead to investment in more cost-effective projects. But a higher non-Federal share could also impose significant burdens on groups that benefit from these projects and on some States. The task of policy is to strike the appropriate balance between using the Nation's water resources more efficiently and the financial burdens thereby imposed.

In my testimony today, I will discuss:

First, cost sharing under current policy and how it meshes with current needs;

Second, how a higher non-Federal cost share could contribute to more cost-effective projects;

Third, the likely effects of such increases on States, localities, and private users; and,

Finally, general approaches to mitigating those effects.

CURRENT POLICIES AND NEEDS

Under current policies, the Federal share of water project costs varies by project type and by Federal agency. On average, the Federal Government has paid about 70 percent of combined construction and operating costs. States or local jurisdictions generally contribute land, easements, or rights-of-way; users sometimes repay a portion of capital costs and, more often, pay operating and maintenance costs. Together, these non-Federal contributions account for the remaining 30 percent of the total cost of an average water project. The variation around this average is wide, however. In municipal and industrial water supply, for example, beneficiaries pay about 64 percent of project costs. By contrast, users of inland waterways pay less than 10 percent. Recipients of irrigation water pay about 19 percent.

These relatively high Federal shares grew out of a desire to stimulate economic development, to provide basic, nationwide transportation services, and to help States that could not manage or finance sizable capital investments. High Federal cost shares are less well-matched to today's needs for several reasons.

First, many of the original goals of regional developnent have been met. For example, the irrigation program of the Bureau of Reclamation was intended to help settle the West by providing subsidized water to family farmers. Today, agriculture in Western States is a mature industry, suggesting that the need for further developmental subsidies may have passed. Freight shipping on inland waterways is also a heavily subsidized, but mature, industry. Current Federal subsidies still cover about one-fourth of the costs of barge shipments, however—many times the subsidy to competing shipping modes, such as railroads, trucks, or pipelines.

From an economic point of view, continued subsidization encourages overinvestment and distorts economic choices. A roughly 80 percent subsidy to western irrigators, for example, charges general taxpayers for building projects that small groups of beneficiaries might be unwilling to pay for if they were assessed the full cost. This encourages the cultivation of water-intensive crops that might not be grown if water was priced at the cost of providing it. Similarly, a subsidy of over 90 percent to users of the Nation's inland waterway system effectively transfers a portion of waterway freight costs from shippers to the general public. Lower costs to waterway shippers can divert traffic from other, perhaps more economic, transportation modes to the waterways and promote increased demand for additional Federal investments in channel dredging, lock replacement, and the like.

Second, with the majority of the nationally important water projects already in place, needs are shifting toward maintenance, repair, and replacement of these structures rather than building new ones. For example, the average age of the 194 locks in the inland waterway system is 40 years, and some locks are approaching 80 years of service. A 50-year service life is generally considered the limit for safe and efficient operation of navigational locks.

The Corps of Engineers estimates that reconstruction or rehabilitation of 37 locks would have to be undertaken between now and 1990 at a total cost of about $5.4 billion in order to maintain navigational safety and efficiency. Similarly, an inspection of dams by the corps suggests major rehabilitation needs over the next 10 years. This shift in priorities has already been reflected in a Federal budget. In fiscal year 1968, appropriations for operations, maintenance, and rehabilitation were 19 percent of the water resource total; by fiscal year 1984, this will have increased to over half.

Third, the remaining new construction needs appear dominated by projects of largely local concern. For example, of nine new projects proposed by the Corps of Engineers for 1983, four were local flood control projects designed to protect urban areas and three were hydroelectric projects with 100-percent local financing. Similarly, the Water Resources Council estimated that three-fifths of future flood losses would occur in small, upstream communities. Protecting these communities would require local flood control measures rather than major, inter-state structures such as already built by the Corps of Engineers.

Finally, there is considerable evidence that State capabilities have grown significantly. State and local water planning staffs increased by 82 percent from 1960 to 1980, while their Federal counterparts remained constant in number. The increased numbers are matched by an apparent growth in financial sophistication. By 1982, for example, 29 States were operating special or revolving water resources funds. In the same year, 33 States gave loans and grants to local entities to help finance a full array of water projects, ranging from single-purpose water supply or wastewater treatment projects to multiple-purpose water development projects.

COST-SHARING POLICIES AND COST EFFECTIVE INVESTMENTS

The shift in investment priorities—away from large, new facilities for regional development and toward local projects, maintenance, and rehabilitation—suggests a need for reexamination of Federal water policies. Cost-sharing policies are a part of that reexamination because a higher non-Federal cost share would probably lead to investment in more cost-effective projects.

Many Federal water projects convey benefits to well-defined private groups. These benefits, often termed "vendible benefits," include water supply for municipal, industrial, or agricultural use; navigation services provided by the inland waterway system or by individual ports and harbors; hydroelectric power; and water-based recreation.

When the recipients of these services know that they will have to repay any expenditures made on their behalf, they have a greater incentive to work with the responsible Governmental unit to develop the most cost-effective investments. Charges that recover the full cost of providing vendible benefits would lead to demand for projects whose benefits are most likely to exceed their costs.

In addition, a second general category of benefits—flood control, water quality, fish and wildlife, and the like—is essentially public in nature and appropriately paid for by the taxpayers of the area that reaps the benefits. For the growing number of water projects that are primarily of local or regional interest, full cost recovery from the States or localities that receive the benefits would provide much the same incentives for cost-effective investment as charging private beneficiaries.

If States, localities, and private users continue to put up only a small share of total costs, the demand for water projects could continue at a level that, if met, would significantly increase current Federal spending. Although no new water projects have been authorized since 1976, the combined construction outlays of the Corps of Engineers, the Bureau of Reclamation, and the Soil Conservation Service were about $2.3 billion in fiscal year 1982. If reasonable estimates of the demand for rehabilitation and construction were met, annual Federal outlays would have to increase to around $3.7 billion, and perhaps even as high as $5 billion. This estimate excludes the roughly $24 billion in currently authorized, but unfunded or inactive, projects of the corps and the Bureau, most of which will probably never be built.

This situation leaves the Congress with a basic and difficult choice regarding cost-sharing policies. Current practices could be continued, either tolerating continued growth in the backlog of projects or attempting to fund them despite large Federal deficits. Alternatively, the non-Federal share of water project costs could be increased, eventually resulting in more cost-effective investments, but possibly placing significant financial burdens on some groups and on the budgets of less financially sound States. I will address the nature and magnitude of these burdens next, and then suggest some ways that they might be mitigated.

EFFECTS OF GREATER, NONFEDERAL COST SHARES

Significant increases in the prices of Federally subsidized water and water project benefits would ensue if users were to pay the full costs of vendible benefits. In the central valley of California, for example, farmers pay about $20 per acre-foot for water that costs the Federal Government about $100 per acre-foot to deliver. This is typical in the West, where, on average, farmers currently receiving subsidized irrigation water would pay roughly five times the subsidized price with full cost recovery. Under current subsidized prices, water averages about 22 percent of the total production cost of irrigated farming. Thus, a significant increase in its cost could eventually cause farmers to shift to less water-intensive crops and use more efficient irrigation methods. Some might leave the business entirely.

Shippers on the inland waterways now pay a fuel tax of 6 cents per gallon, scheduled to increase to 10 cents by fiscal year 1986. Under full cost recovery, however, waterway users would have to pay about 50 cents per gallon by 1990. This would increase total shipping costs by an average of 16 percent, and traffic on some waterways might be curtailed. For example, shipments of soybeans and grain, which account for about 10 percent of all barge tonnage, would increase in cost by an average of 6 cents per bushel. This increase in cost would be shared by three parties: barge operators; farmers; and consumers, both here and abroad. When grain markets are slack, as is now the case, farmers and barge operators would bear most of the cost. When they are tight, domestic and foreign consumers would pay a greater share. Similarly, the cost of shipping coal—accounting for roughly 25 percent of all tonnage on the waterways—would also increase, ultimately raising consumer's electricity bills by about 1 percent.

Shippers using the Nation's ports and harbors would also pay more under user fees set to recover 100 percent of operation and maintenance costs. International shippers would pay about 40 cents per ton more than they now pay, or a 1-percent increase in total shipping costs. Great Lakes shipping costs would increase by about 19 percent and coastal shipping costs would rise by about 7 percent.

If users were also charged for new capital projects, fees could increase somewhat more. For example, deepening the Port of Norfolk to accommodate larger, deep-draft coal ships would increase user fees by about $1 per ton of coal. However, the increased fee would be much less than the anticipated savings from using the larger ships.

It is more difficult to estimate the effect that a higher share of water costs would have on the States. In the aggregate, State capabilities to finance water resources have grown significantly in recent years, although many States are under budgetary pressures to meet growing demands with lower revenues caused by the recession. Indeed, State and local general expenditures for all water resources purposes increased from $89 per capita in 1960 to $111 per capita in 1980 in 1982 dollars. But shifts in State revenues from relatively static sources, such as property and excise taxes, to greater reliance on income and sales taxes, have linked receipts more closely to the performance of the economy. Partly as a result of the recent recession, six States had budget deficits in 1981.

To avoid deficits, more than half the States cut government services and employees. Over the past 2 years, 40 States have raised taxes—the greatest number of tax increases in more than a decade and a reversal of the 1978–80 period when 31 States actually cut taxes.

In general, energy-producing States appear to be in the best position to take on increased financial responsibilities, while some industrial States are in the most difficult position.

States need not always rely on general revenues, however. Many water projects could draw upon financial sources closely linked to the beneficiaries. In Florida, for example, capital funds for local water supply were created from a recently enacted real estate transfer tax. In effect, the demand for additional water service is financed by purchasers of real estate.

FINANCING HIGHER NONFEDERAL COST SHARES

There are a variety of ways in which the transition to higher non-Federal cost shares could be eased. The first and most obvious is through phasing in the new cost-sharing arrangements.

In the 1978 Inland Waterways Revenue Act, for example, a 4-cents-per-gallon fuel tax on waterway shippers was authorized to begin in fiscal year 1981. The level of this tax will increase slowly until fiscal year 1986, when a 10-cents-per-gallon tax will be in effect. Phasing-in user fees for new water projects and for operation and maintenance of existing projects, when appropriate, would minimize disruptions to current funding procedures and to groups that may have based decisions upon the assumption of continued Federal subsidies.

In addition, a variety of financing mechanisms that could ease the transition to higher non-Federal cost sharing might be considered. For example, a Federal infrastructure bank could lend development capital to the States for investment in projects of State or local interest. These loans, plus accrued interest would be paid back in full from State user fee collections, tax receipts, or both. Under such an arrangement, the costs would ultimately be borne by the recipients of the benefits—as is appropriate from an economic point of view. But the aggregation of construction funds at the Federal level would relieve the States of financing burdens that might accompany their higher share of the costs. Alternatively, the Federal Government could provide the initial capital for State infrastructure banks that would function in much the same way. Of course, the Federal Government would continue to select, finance, and manage projects of nationwide interest, collecting user fees that would cover the full cost of providing vendible benefits.

Finally, the Federal Government could provide block grants to the States to hasten needed local water projects and distribute Federal funding in an equitable manner. Grant money could be used to fund individual projects directly or to capitalize State water banks. The States could then administer loan programs locally, perhaps in the same manner as a Federal infrastructure bank or fund.

In summary, Mr. Chairman, a higher non-Federal cost share would ultimately have desirable economic and budgetary consequences. These must be balanced, however, against the effects on beneficiaries and States. A phasing in of the higher non-Federal share together with alternative financing mechanisms are worthy of consideration as approaches to reduce these effects.

Thank you, Mr. Chairman.

[An attachment to Dr. Rivlin's statement follow:]

TABLE 1. EFFECTIVE NONFEDERAL COST SHARES OF FEDERAL WATER RESOURCES DEVELOPMENT, BY AGENCY (in percents)

Resource Development	Army Corps of Engineers	Bureau of Reclamation	Soil Conservation Service	Weighted Average of all Federal Water Agencies
Multipurpose Dams				
Urban Flood Damage Reduction	17	-- a/	-- a/	20
Rural Flood Damage Reduction	7	10	27	11
Irrigation	19	18	54	19
Municipal and Industrial Supply	54	71	100	64
Hydroelectric Power	61	65	-- b/	64
Water Quality	3	82	-- b/	60
Fish and Wildlife	11	13	57	14
General Recreation	17	18	63	19
Navigation Works				
Inland Waterways	6-11c/	7	-- b/	6
Commercial Harbors	16	-- b/	-- b/	16
Agency Mean	20	37	49	30

SOURCE: Adapted by Congressional Budget Office from Water Resources Council data.

a. Agency reported a cost category for this purpose but not cost sharing.

b. Agency indicates no activity for this purpose.

c. Receipts from the fuel tax implemented pursuant to the Inland Waterway Revenue Act of 1978 could increase the nonfederal share to as much as 11 percent from the Water Resources Council's 1974 calculation of 6 percent.

Senator ABDNOR. Thank you, Dr. Rivlin, for that very informative statement.

When was a study to be completed?

Ms. RIVLIN. In June is our expectation.

Senator ABDNOR. That would be fine. It would be the final report. I don't mean to be parochial, but I do come from one of the States which you characterize as financially sound.

We have a constitutional provision in our State which says we cannot go into debt. We may raise taxes here and there, but it pays off. We are not blessed with all of those natural resources that other States have.

So I am commending the ability to pay concept relative to the cost sharing.

How would that relate to the financing measures that you mentioned?

Is there any way we can talk about the ability to pay on this, too?

Ms. RIVLIN. Are you referring to the ability of States or of farmers?

Senator ABDNOR. Those who are in favor of the projects. It could be farmers, it could be for irrigation, it could be cities, it could be for flood control or any number of instances.

Ms. RIVLIN. Financing a project on a user-fee basis, where you attempt to recover the cost from the beneficiaries, and financing the project on an ability to pay basis are very different—though not entirely incompatible—ways of going at the financing of a project.

Historically in irrigation we have attempted to recoup part of the cost of irrigation water but to distribute the burden on the basis of the profitability of the farm.

It is difficult to square that basic notion with the notion that you really want to have projects that are the most profitable and recover the full cost or a substantial share of the cost of the project. One way to do it would be to try to finance a project such as a new irrigation project, over a very long period. In that way, the burden would be less on any individual farmer. Nevertheless, many projects would probably not be desired by the beneficiaries if those beneficiaries had to pay a greater share of their cost than is now the case.

Senator ABDNOR. Would you apply your approach to cost-sharing the cost of all projects? I am not only talking about water now.

Let's take mass transit. I think we probably put more money into Washington, D.C., mass transit than we have in all the western projects we have.

How do we relate these two? Is there any relationship between building mass transit for the people or building food factories for the people, or for the irrigation?

Do you see any relationship? The last I knew we were still talking about subsidizing fares, let alone getting some of the cost of the project back.

Ms. RIVLIN. I think there is a relationship and, again, it illustrates the difficult problem of how to finance public infrastructure.

In mass transit, strong arguments have been made that the value to a city of mass transit system cannot always be recouped at the fare box; that if the user charges cover 100 percent of the cost, people will begin not to use the mass transit system, will crowd the roads, putting other costs on the rest of the community.

This has been used as an argument for the subsidizing of mass transit which, as you quite rightly point out, has been substantial.

Senator **ABDNOR**. It really is. I just feel mass transit support is very important to the community and flood control is very important to the country as a whole and involves people's lives.

Going back to a State, like South Dakota, do we take into consideration the past contributions, so to speak, and then put into projects? Using the Missouri River Reservoir, I don't know if my State is deriving any great benefit from it. It has been promised a lot of the time.

There are 300,000 acres in my State that is off the tax role, out of production. I guess it had a very noble purpose mainly for the larger cities downstream who no longer know what floods are all about. I think it has been very valuable to them.

In return, do we say when our projects come up that maybe a State like South Dakota that contributed 300,000 acres to the total of 500,000 acres, shouldn't we receive some credit for it?

How do we adjust for that?

Ms. **RIVLIN**. That seems like a reasonable argument to make to me.

Senator **ABDNOR**. I am thinking of the past and the future. Maybe if we were starting out from scratch, we could solve the problem a lot easier.

Ms. **RIVLIN**. I think that is the essence of why the problem is so difficult. There has been a long history of subsidizing of these kinds of projects in different ways. People have come to rely on that, and to change it is a very difficult thing to do.

The other kinds of history that you alluded to also complicate the problem further. It is not as difficult to think what you would do if you were starting over as it is to figure out what to do in midstream.

You are quite right.

Senator **ABDNOR**. Of course, in some of the States and localities where the projects proposed, they are simply unable or don't have the means to provide it.

Could the real estate finance proposal be applied nationally on flood control projects?

Ms. **RIVLIN**. I think it is certainly worth considering.

Senator **ABDNOR**. And maybe some other projects that are underway.

Would you do it locally? Or do you think we ought to go on a national level or could we?

Ms. **RIVLIN**. I think it really depends on the nature of the project you are talking about. Most of the flood control projects now being proposed do seem to be of much more limited geograpic area than used to be the case. That suggests that more local financing is appropriate.

I don't think that anybody is questioning the fact that flood control is a public benefit. It is something appropriately funded at least in part by the government of the area where the flood might be.

It is often hard to figure out which government that is; how far it extends. But doing it on the basis of some kind of real estate taxation also makes sense because you don't want to encourage people to locate in places where the flood danger is very high.

Senator **Abdnor**. I realize that people have already settled in those areas which makes the demand and the pressure for carrying on flood control projects even more imperative.

Earlier this morning, one of the Senators testified on the flood control project in one State, costing $70 million. If we are really serious about this it is going to take some real intense studying here and some factual information. I am sure your report is going to be very helpful to us.

We have got to consider many areas if we are going to apply cost sharing across the board. I think while this committee is concerned with in water projects and development, it wouldn't be too different from how we handle mass transit or anything else.

There is a relationship. The needs and the benefits, who is going to help pay for those things? So this is quite a problem. We talked about deep water ports. We are very interested in that right now. We are hopeful that the administration is going to come forward with some guidance. We appreciate the fact that we tried to get other witnesses here today from the administration. They were unable to appear or were not ready.

We are very appreciative of your willingness to come forward and give us your thoughts and information at this time. But, obviously, you have a real challenge for us here as we go into this subject.

As I told you last year and I still feel this way, I just want to make sure that what we do is proper and right. Because doing something unfairly which we may think is going to work out may do serious damage to programs that need to be carried out for the good of the country as a whole.

Agriculture right now is under great financial stress. I don't think that is any secret. More and more we are bearing that out. Yet they are an important part of this, with irrigation, with transportation.

Transportation in many areas of the country is becoming very seriously impaired because of the economic factors.

So, this is the subject that we are going to give careful study to. I know we can. I don't know how much longer you are going to be with us.

How long will you be?

Ms. **Rivlin**. It depends on when your colleagues can find time to talk about who is going to be my successor. As you pointed out earlier, the budget debate has been absorbing everybody's time. The question of the CBO Director is far down the list of concerns at the moment.

Senator **Abdnor**. You do a good job. They don't want you to go. So they are deliberately finding a way to keep putting it off.

We know you are going to be of great help to us as we delve into this subject.

Ms. **Rivlin**. Let me just say that I hope that our report will be helpful, but there is certainly no way that it will make the subject easy. The subject is inherently very difficult and I don't envy you one bit in having to make these kinds of decisions.

Senator **Abdnor**. I tell you, there are going to be a lot of questions on this. I know other members of the subcommittee would have liked to be here today.

So, rather than prolong this, I know you are busy, I think we will ask our members to prepare questions that they would like and we will submit them to you and your people for comments.

Hopefully, we will feel free at a later time to ask you to come back when we are ready for additional discussion. You say by June you hope to have your study completed?

Ms. **Rivlin**. Yes. Mr. Bodde looked reasonably confident when we said that.

Mr. **Bodde**. Yes, sir. It will be done in June.

Senator **Abdnor**. Do much of the figures and facts you have today, come from that study?

Ms. **Rivlin**. Yes.

Senator **Abdnor**. We want lots of figures and facts when you come back before us.

We thank you, very much for your appearance today. We know you are a very busy person.

What goes on down in the Budget Committee is of utmost importance to you, too.

Thank you.

Ms. **Rivlin**. Thank you very much, Mr. Chairman.

Senator **Abdnor**. With that, we stand in recess.

[Whereupon, at 11:45 a.m., the subcommittee recessed, to reconvene at the call of the Chair.]

[An analysis of projects from the Corps of Engineers and statements and bills relating to projects not discussed at the hearings follow:]

DEPARTMENT OF DEFENSE

DEPARTMENT OF THE ARMY
OFFICE OF THE ASSISTANT SECRETARY
WASHINGTON, D.C. 20310

17 MAY 1983

Honorable James Abdnor
Chairman, Subcommittee on Water Resources
Committee on Environment and Public Works
United States Senate
Washington, D. C. 20510

Dear Mr. Chairman:

I am responding to your letter of May 3, 1983. Specifically, I am providing a summary analysis sheet for each of the seventeen bills and, in a separate enclosure, the position of the Administration on each bill.

The Office of Management and Budget advises that there is no objection to the submission of this report to Congress.

Sincerely,

Bill Gianelli
William R. Gianelli
Assistant Secretary of the Army
(Civil Works)

Enclosures

S. 196 (INOUYE), 98th Congress

TITLE: To deauthorize the navigation project for the Kalihi Channel at Honolulu Harbor, Hawaii.

SUMMARY: Deauthorizes subject project which was authorized by the River and Harbor Act of 1954.

Section-by-Section Analysis

Section	Provisions
1	Deauthorizes the navigation project for the Kalihi Channel at Honolulu Harbor authorized by section 101 of the River and Harbor Act of 1954.

S. 207 (INOUYE), 98th Congress

TITLE: To authorize the Secretary of the Army, acting through the Chief of Engineers and in cooperation with the governments of the Trust Territory of the Pacific Islands and the Commonwealth of Northern Mariana Islands, to study and draft plans for the development, utilization, and conservation of water and related land resources of such Territory and Commonwealth.

SUMMARY: Authorizes the Secretary of the Army, acting through the Chief of Engineers and in cooperation with the Trust Territory of the Pacific Islands (TTPI) and the Commonwealth of Northern Mariana Islands (CNMI) to study and draft plans for the development, utilization, and conservation of water and related land resources in the TTPI and the CNMI. Authorizes appropriations of $175,000.

Section-by-Section Analysis

Section	Provisions
1	Authorizes the Secretary of the Army, acting through the Chief of Engineers and in cooperation with the Trust Territory of the Pacific Islands and the Commonwealth of Northern Mariana Islands to study and draft plans for the development, utilization, and conservation of water and related land resources in the TTPI and the CNMI. Authorizes appropriations of $175,000.
2	Such studies shall consider flood protection, use of flood plains, navigation facilities, hydroelectric power generation, regional water supply and waste water management facilities, water quality, general recreational facilities, fish and wildlife, and other measures for environment improvement and economic and human resources development. Studies will be compatible with comprehensive development plans of local planning and Federal agencies.
3	Authorizes appropriations of $175,000.

S. 433 (ROTH), 98th Congress

TITLE: To authorize and direct the Secretary of the Army, acting through the Chief of Engineers, to relocate the Christina River Dredge Spoil Disposal Site.

SUMMARY: Authorizes and directs the relocation of the present site of disposal for dredge spoil from the Christina River project, Wilmington, Delaware, from Cherry Island to a site on the Delaware River between the Wilmington Marine Terminal and Pigeon Point.

Section-by-Section Analysis

Section	Provisions
1	Authorizes and directs the Secretary of the Army, acting through the Chief of Engineers, to relocate the present site of disposal for dredge spoil from the Christina River project, Wilmington, DE, from the current location at Cherry Island to a site on the Delaware River between the Wilmington Marine Terminal and Pigeon Point.

S. 455 (WARNER), 98th Congress

TITLE: To modify the navigation project for Lynnhaven Inlet, Bay, and connecting waters, Virginia.

SUMMARY: Authorizes and directs reimbursement to the City of Virginia Beach, VA, in the sum of $1,630,000, for remedial work to Long Creek Canal accomplished by the City as a result of the Lynnhaven Inlet, Bay, and connecting waters, Virginia, project.

Section-by-Section Analysis

Section	Provisions
1	Authorizes and directs the Secretary of the Army, acting through the Chief of Engineers, to reimburse the City of Virginia Beach, VA, in the sum of $1,630,000, for remedial work carried out by the City as a result of the navigation project for Lynnhaven Inlet Bay, and connecting waters, VA (authorized by section 101 of the River and Harbor Act of 1962).

S. 456 (WARNER), 98th Congress

TITLE:	To authorize the Secretary of the Army, acting through the Chief of Engineers, to carry out certain erosion control projects on the Chesapeake Bay, Virginia.
SUMMARY:	Authorizes and directs protection of Tangier Island through the design and construction, on an emergency basis, without study or other requirement of law, of a structure about 8,200 feet in length on the western shore of the island to protect it against erosion.

Section by Section Analysis

Section	Provisions
1	Authorizes and directs the Secretary of the Army, acting through the Chief of Engineers, to design and construct a structure about 8,200 feet long on the western shore of the island to protect it against erosion. Local interests shall, prior to construction, provide lands, easements, rights-of-way, and relocations agree to operate and maintain the structure after construction and hold and save the United States free from damages done to the construction. No study or other requirement of any Act shall apply to this project and it shall be carried out on an emergency basis.

S. 635 (STAFFORD), 98th Congress

TITLE: To authorize the United States Army Corps of Engineers to provide assistance to local communities.

SUMMARY: Provides continuing authorities to the Army, with appropriations authority totalling $36,000,000 and loan authority totalling $50,000,000 for the following programs: research, operational efforts, and technical assistance to local units of government concerning control of river ice; survey and technical assistance to local public agencies, upon request of such agencies, concerning installation of hydroelectric facilities at former industrial sites, millraces, etc.; and technical assistance to public agencies or individuals and authority for loans up to $10,000 concerning streambank erosion control. Also further modifies the Waterbury, Vermont, project in the Winooski River Basin to authorize any major rehabilitation by the Secretary of the Army.

Section-by-Section Analysis

Section	Provisions
1	Short title: "Small Communities Water Resources Assistance Act of 1983."
2	1. Authorizes the Secretary of the Army, acting through the Chief of Engineers, to (a) undertake a program of research for control of river ice, (b) assist local communities in breaking up river ice which may cause or aggravate flood damage and streambank erosion, and (c) to provide technical assistance to such communities in plans to control river ice, to include authority to "acquire" ice-control or -breaking equipment for loan to local governments. 2. Authorizes appropriations of $5,000,000 for each of FY 84, 85 and 86. 3. Requires the Secretary of the Army to report to the Congress on activities under this section NLT 1 Mar 86.
3	1. Requires the Secretary, upon request of local public officials, to survey former industrial sites, millraces, etc. for hydroelectric power potential and facilities and to provide technical assistance to local public agencies, including electric cooperatives, in designing projects to rehabilitate sites which have been surveyed. 2. Authorizes appropriations to implement this section of of $5,000,000 for each of FY 84, 85, and 86.

Section	Provisions
4	1. States Congressional finding that streambank erosion creates significant financial and environmental losses to the Nation. 2. States Congressional declaration that prevention of streambank erosion is in the national interest. 3. Requires that the Secretary provide, upon request, (a) technical assistance to persons or agencies regarding streambank erosion, and (b) assistance to applicants downstream of property threatened by erosion, concerning flooding, if the property owner "allows the applicant to perform such erosion retarding work." 4. Authorizes appropriations to implement this section of $2,000,000 for each of FY 84, 85, and 86. 5. Authorizes the Secretary to provide loans up to $10,000, to be repaid within 10 years, to any public or private "group or agency or individual" for work to stabilize streambanks. Work plans will be first submitted to and approved by the Secretary. Loans will be interest free and repaid in equal installments. Notwithstanding the above, loans may be made to a public agency for up to $25,000 for a period of 20 years. Authorizes appropriations of $50,000,000 for these proposals.
5	Further modifies the Waterbury, Vermont, project (authorized for modification in section 10 of the 1944 Flood Control Act (P.L. 534, 78th Congress, approved 22 Dec 44)) to provide that any major rehabilitation of the project shall be undertaken by the Secretary of the Army. Nothing in this section shall be construed as altering the conditions established in Federal Power Commission (now FERC) license numbered 2090, issued 16 Sep 54.

S. 674 (SPECTER), 98th Congress

TITLE: To authorize implementation of a project for flood damage prevention at Milton, Pennsylvania.

SUMMARY: Authorizes construction of a flood damage prevention project for the Borough of Milton in Northumberland County, PA, located on the west branch of the Susquehanna River, at an estimated cost of $87,000,000.

Section-by-Section Analysis

Section	Provisions
1	The Secretary of the Army, acting through the Chief of Engineers, is authorized to implement a flood damage prevention project at Milton, Northumberland County, PA, on the west branch of the Susquehanna River, in accordance with a report of the Corps of Engineers entitled "Local Flood Protection at Milton, Pennsylvania," dated 13 Jul 77, at an estimated cost of $87,000,000.

S. 812 (DOMENICI), 98th Congress

TITLE: To authorize the construction of a project for flood control in the vicinity of Albuquerque, New Mexico, and for other purposes.

SUMMARY: Authorizes construction of a flood control project near Albuquerque, NM, at an estimated Federal cost of $39,200,000; authorizes $250,000 in additional funds for the recovery of cultural resource data at Santa Rosa Lake, Pecos River, NM; requires the Army Corps of Engineers to retain, at its current size, any office of a District Engineer which is located more than 500 miles from the nearest District Engineer office; and requires the Army to transfer to the responsibility of the Albuquerque District Engineer all responsibilities held by the Los Angeles and Sacramento District Engineers in the State of New Mexico.

Section-by-Section Analysis

Section	Provisions
1	1. The Secretary of the Army, acting through the Chief of Engineers, is authorized to construct a flood control project in the vicinity of Albuquerque, NM, in accordance with the report of the Chief of Engineers entitled "Middle Rio Grande, Bernadillo to Belen, New Mexico," dated 23 Jun 81, at an estimated Federal cost of $39,200,000. 2. Authorizes the Chief of Engineers to increase flood protection by dredging the bed of the Rio Grande in the vicinity of Albuquerque to an elevation lower than existed on the date of enactment of this section. 3. Non-Federal participation in project financing will be limited to the provision of lands, rights-of-way, and easements, unless a standard for cost sharing on local flood protection projects is established by law prior to enactment of this section.
2	Modifies the project for Santa Rosa Lake, Pecos River, NM, authorized by section 203 of the Flood Control Act of 1954, to authorize expenditures, in addition to amounts authorized previously by the Reservoir Salvage Act of 1960, as amended, not to exceed $250,000 for the recovery of cultural resource data.
3	Prohibits the Secretary of the Army, acting through the Chief of Engineers, from closing any District Engineer office or downgrading/decreasing its staff by more than 5 percent, unless such office currently is located within 500 miles "of another office of the Corps of Engineers of the same rank."

Section	Provisions
4	Requires the Secretary of the Army, acting through the Chief of Engineers, to transfer promptly to the responsibility of the Albuquerque District Engineer the current responsibilities of Sacramento and Los Angeles, CA, District Engineers in the State of New Mexico.

S. 850 (HEFLIN), 98th Congress

TITLE: To authorize the Secretary of the Army to correct certain slope failures and erosion problems along the banks of the Coosa River.

SUMMARY: Authorizes "action as may be necessary" by the Army to preserve two national historic landmarks from damages resulting from erosion of the banks of the Coosa River, Alabama.

Section-by-Section Analysis

Section	Provisions
1	The Secretary of the Army, acting through the Chief of Engineers, shall take such action as may be necessary to correct slope failures and erosion problems along the banks of the Coosa River in order to protect the Fort Toulouse National Historic Landmark and Tashigi Indian Mound in Elmore County, AL.

S. 878 (HEFLIN), 98th Congress

TITLE: To authorize and direct the Secretary of the Army to correct certain erosion problems along the banks of the Warrior River near Moundville, Alabama.

SUMMARY: Authorizes actions in accordance with a study by the District Engineer, as necessary, at an estimated cost of $4,117,991, to correct bank erosion problems on the Warrior River in order to protect Mound State Park near Moundville, AL.

Section-by-Section Analysis

Section	Provisions
1	Authorizes and directs the Secretary of the Army, acting through the Chief of Engineers, to take action in accordance with a "study directed by the District Engineer," dated 20 Jul 81, as may be necessary, at an estimated cost of $4,117,991, to correct erosion problems along the banks of the Warrior River in order to protect Mound State Park, near Moundville, AL. Authorizes appropriations as necessary.

S. 912 (STAFFORD), 98th Congress

TITLE: To modify the authority for the Richard B. Russell Dam and Lake project.

SUMMARY: Authorizes the Army to provide power to the City of Abbeville, South Carolina, to mitigate the reduction in hydroelectric power produced at the City-owned plant at Lake Secession caused by the construction and operation of the Richard B. Russell Dam and Lake project.

Section by Section Analysis

Section	Provisions
1	Modifies the Richard B. Russell Dam and Lake project to authorize the Secretary of the Army, acting through the Chief of Engineers, to provide such power to the City of Abbeville, South Carolina, as the Secretary determines to be necessary to mitigate the reduction in hydroelectric power produced at the City-owned plant at Lake Secession caused by the construction and operation of the Richard B. Russell project. This power shall be provided to the City for the remaining service life of the City-owned plant as part of the operational costs and requirements of the project. The Secretary may prescribe terms and conditions in consultation with the Secretary of Energy, who is authorized to provide assistance in delivering power.

S. 987 (STAFFORD), 98th Congress

TITLE: To authorize the imposition of entrance, admission or additional user fees at certain water resources development areas administered by the Department of the Army.

SUMMARY: By removing restrictions in existing law, authorizes the Department of the Army to collect entrance and user fees at outdoor recreational areas administered by the Corps of Engineers at water resources development projects.

Section by Section Analysis

Section	Provisions
1	Amends section 4 of the Land and Water Conservation Fund Act of 1965 as amended (16 U.S.C. 4601-6a) as follows: - amends subsection (a) to provide the Army with authority comparable to other Federal land and water resources development agencies to impose reasonable admission and use fees. - deletes the next to last sentence in subsection (b) to remove the existing restriction on the Army to impose such fees.
2	Repeals section 210 of the Flood Control Act of 1968.

S. 1028 (GORTON), 98th Congress

TITLE: To modify the navigation project on the Cowlitz River, Washington, to authorize the Secretary of the Army to implement interim measures to control floods in the lower Cowliz River area and improve navigation on the Columbia River.

SUMMARY: Authorizes flood control measures on the Cowlitz and Toutle Rivers in the State of Washington by dredging or other means to assure flood protection for developed areas in the vicinity of these rivers and to reduce sedimentation flow and possible blockage on the Columbia River.

Section by Section Analysis

Section	Provisions
1	Modifies the navigation project on the Cowlitz River, Washington, approved by the Act of June 25, 1910, to authorize the Secretary of the Army, acting through the Chief of Engineers, to implement and maintain flood control measures on the Cowlitz and Toutle Rivers by dredging or other means determined necessary by the Secretary to assure protection against a 100-year flood on the lower Cowlitz River for developed areas in the vicinity of both rivers and to reduce sedimentation flow and the chance of blockage on the Columbia River.
2	Provides that the authorization in section 1 shall remain in effect until such time as permanent solutions and measures for flood control and navigation, as identified in the Chief of Engineers final feasibility report on the Cowlitz and Toutle Rivers to be submitted to the President and the Congress, are fully implemented.

S. 1073 (CHILES), 98th Congress

TITLE: To amend section 104 of the River and Harbor Act of 1958, Public Law 85-500, as amended, to increase the annual funding authority for the aquatic plant control program.

SUMMARY: Increases the annual appropriations authority for the aquatic plant control program from $5,000,000 to $10,000,000.

Section by Section Analysis

Section	Provisions
1	Further amends section 104(b) of the River and Harbor Act of 1958 (P.L. 85-500) to strike out "$5,000,000" and insert in lieu thereof "$10,000,000." NOTE: These figures refer to the annual authorization for appropriations for the program.

S. 1075 (DOMENICI), 98th Congress

TITLE: To authorize the U.S. Army Corps of Engineers to undertake certain modifications at Abiquiu Dam in New Mexico.

SUMMARY: Authorizes construction, at Federal expense, of a set of emergency gates in the conduit of the Abiquiu Dam, New Mexico, to increase safety and enhance flood and sediment control.

Section by Section Analysis

Section	Provisions
1	Authorizes the Secretary of the Army, acting through the Chief of Engineers, to construct, at Federal expense, a set of emergency gates in the conduit of the Abiquiu Dam, New Mexico, to increase safety and enhance flood and sediment control. Provides that this feature, which was eliminated during original construction due to cost constraints, shall be considered as completing the original design concept for the project.

S. 1112 (GORTON), 98th Congress

TITLE: To modify the city waterway navigation channel project, Thomas Harbor, Washington, to redefine the project boundaries.

SUMMARY: Modifies the project to redefine the boundaries in accordance with recommendations in a feasibility report of the Seattle District Engineer, dated November 1981.

Section by Section Analysis

Section	Provisions
1	Modifies the city waterway navigation channel project, Tacoma Harbor, Washington, authorized by the River and Harbor Act of June 13, 1902, to direct the Secretary of the Army, acting through the Chief of Engineers, to redefine the project boundaries in accordance with the recommendations of the Seattle District Engineer contained in appendix B of the feasibility report dated November 1981.

S. 1131 (CHILES), 98th Congress

TITLE: To deauthorize the Cross-Florida Barge Canal project, to adjust the boundaries of the Ocala National Forest, Florida, and for other purposes.

SUMMARY:

1. Deauthorizes the high-level lock barge canal from the Saint Johns River across Florida to the Gulf of Mexico.
2. Authorizes the Army to operate and maintain the existing facilities (and appurtenant lands) of the project pending further disposition by law of the project, its facilities, and lands.
3. Extends the present boundaries of the Ocala National Forest to include certain lands north and west of the Oklawaha River
4. Transfers lands and improvements owned by the Army within the extended boundaries of the national forest to the Secretary of Agriculture, to be administered as a part of the national forest, not later than September 30, 1984, except as provided in section 1.
5. Requires that the Secretary of Agriculture acquire lands of the State of Florida within the extended boundaries of the national forest by purchase or exchange and authorizes appropriation of such sums as may be necessary for this purpose for fiscal year 1984.

Section by Section Analysis

Section	Provisions
1	Provides that the high-level lock barge canal from the Saint Johns River across Florida to the Gulf of Mexico authorized by the Act of July 23, 1942, is not authorized after the date of enactment of this Act. Authorizes the Secretary of the Army, acting through the Chief of Engineers to operate and maintain the existing facilities (and appurtenant lands) of the Cross-Florida Barge Canal project in such manner as he determines to be necessary, pending further disposition by law of the project, its facilities and lands.
2	1. Extends the boundaries of the Ocala National Forest, Florida, to include lands north and west of the Oklawaha River as shown on a map dated July 1978, on file at designated offices of the National Forest Service.

Section	Provisions
2	2. Provides that lands of the United States, administered by the Army Corps of Engineers, within the extended national forest boundaries shall be transferred to the Secretary of Ariculture to be made a part of and administered as a part of the Ocala National Forest not later than September 30, 1984, except that the Army shall operate and maintain the existing facilities of the Cross-Florida Barge Canal project pending further disposition by law of such facilities.
	3. Requires the Secretary of Agriculture to acquire lands and interests therein within the extended national forest boundaries by the State of Florida by purchase or exchange using donated or appropriated funds, for fair market value. Authorizes appropriations for fiscal year 1984 of such sums as may be necessary to carry out this provision.

ADMINISTRATION POSITION

1. S. 196: Do not favor enactment. The project was constructed to provide a second entrance for Honolulu Harbor in anticipation of growth in Harbor traffic and for military use. Although neither civilian nor military traffic is using the Kalihi Channel, no study has been made to determine the desirability of future use under normal or emergency conditions. We understand that the proposal for deauthorization is to allow replacement of the existing movable span bridge with a low-level fixed span bridge.

2. S. 207: Object to enactment. Studies for the Commonwealth of Northern Mariana Islands should be done on a reimbursable basis on a priority that would be determined by the Commonwealth. As for the Trust Territory of the Pacific Islands, its political status will probably be changed within the time-frame of the studies which would be undertaken under the authority of this bill. It is anticipated that the United States will guarantee funding for governmental activities over a 15-year period. It is therefore premature to enact legislation to provide services which could be covered under agreements which will be finalized in the near future.

3. S. 433: Do not favor enactment in light of ongoing negotiations between representatives of the State of Delaware and the Department of the Army to relocate the two existing sites on Cherry Island, over time, to a new site. The bill is not necessary and, at a minimum, is premature pending completion of the negotiation process.

4. S. 455: Do not favor enactment. There is no requirement that (1) a determination be made that the work has been acceptably completed, (2) reimbursement will be limited to necessary and actual costs, or (3) acceptance of funds by the City of Virginia Beach forecloses any future claim.

5. S. 456: Do not favor enactment because the authority is premature in the absence of a study, report, and review. Without an Administration-cleared report, it is not certain that this proposal will solve the problem at hand.

6. S. 635: Do not favor enactment. Object to any river ice control technical assistance program, and the acquisition and loan of ice-control or ice-breaking equipment, until a program of research for the control of river ice is completed and feasibility demonstrated.

   As to the rehabilitation of former industrial sites, millraces, and similar type facilities for use as hydroelectric facilities; object to a technical assistance program to the extent it includes planning and detailed design work.

As to a streambank erosion control program: object to providing technical assistance to "any person or agency" or to "any applicant." Also object to establishing a Federal loan program, to be administered by the Secretary of the Army, for the purpose of stabilizing streambanks and riverbanks on behalf of a "private group or agency or individual."

Do not favor enactment of the provisions of section 5 concerning certain authority to undertake "major rehabilitation" of the Waterbury, Vermont, project in the Winooski River Basin. The extent and scope of such "rehabilitation" is vague and not clearly set forth in the bill.

7. S. 674: Do not support enactment since there is no Administration-cleared report and the most feasible plan has been found to be not economically justified.

8. S. 812: Do not favor enactment of Section 1 of the bill since the report on this project has not received full Departmental and Administration review.

Do not favor enactment of Section 2 of the bill although we understand that additional funds are required for archeological recovery activities at Santa Rosa Lake. No documentation has been submitted to support the funds which would be authorized.

Object to the enactment of section 3 of the bill (prohibition against closing any office under the direction of a district engineer unless such office is located within 500 miles of another office of the Corps of Engineers of the same rank). The provision restricts the application of sound management practices including the location and staffing of certain offices based on mission(s) and workload(s).

Object to the enactment of section 4 of the bill (transfer of responsibilities within the State of New Mexico of the district engineers in Sacramento, California, and Los Angeles, California, to the district engineer in Albuquerque, New Mexico) at this time. This proposal needs further study.

9. S. 850: Do not favor enactment since there is no Administration-cleared report and thus no basis to support this provision. The Army would defer to the views of the Secretary of the Interior on the merits of this work.

10. S. 878: Do not favor enactment since there is no Administration-cleared report and thus no basis to support this provision.

11. S. 912: Favor enactment. This proposal is a part of the Army Civil Works legislative program for the 98th Congress, 1st Session.

12. S. 987: Favor enactment. This proposal is a part of the Army Civil Works legislative program for the 98th Congress, 1st Session.

13. S. 1028: Do not favor enactment at this time. The bill is premature pending the completion of the ongoing comprehensive study addressing flood control issues on the Cowlitz and Toutle Rivers and the review of such study report within the Department of the Army and the Administration, and submission to the Congress. Provisions have been and are being made to maintain a reasonable level of flood protection along the Cowlitz River and to maintain navigation depths in the Columbia River until such time as a permanent solution can be adopted. We expect to transmit to the Congress our recommendations before the end of the year.

14. S. 1073: Do not favor enactment. The full amount of funds authorized for the aquatic plant control program was not included in budget requests until recently. The existing $5,000,000 annual appropriations authority is adequate in view of current budget constraints.

15. S. 1075: Modification of the project to correct a safety problem could be undertaken under existing authority if it is determined that a design deficiency exists. Absent a review of the need for this feature, legislative action would be premature.

16. S. 1112: Do not favor enactment since the report on this project has not received full Departmental and Administration review.

17. S. 1131: No position has been established for deauthorization of Cross Florida Barge Canal and the conditions which should be included in such a deauthorization.

WESTERN STATES WATER COUNCIL
220 South 2nd East / Suite 200 / Salt Lake City, Utah 84111 / Phone (801) 521-2800

May 19, 1983

The Honorable James Abdnor
Chairman, Water Resources Subcommitee of
  the Senate Environment & Public Works Committee
Senate Dirksen Building #449
Washington, D.C. 20510

Dear Senator Abdnor:

Enclosed please find a position statement of the Western States Water Council regarding federal water project financing, which I have been asked to submit to you for inclusion in the record of the hearings on May 18 on this subject by the Water Resources Subcommittee.

This matter has been of great interest to us for some time. We hope that you will consider the views of the Council as you consider the subject of water project financing and cost sharing. If you have any questions regarding our position, please feel free to call on me. Should another opportunity arise, we would also be most happy to present it to the Subcommittee in the form of testimony, so as to provide a useful forum for questions and dialogue. Thank you for your consideration of this matter.

Sincerely,

Craig Bell

D. Craig Bell
Executive Director

Encl.

POSITION
# of the
WESTERN STATES WATER COUNCIL
Regarding
FEDERAL WATER PROJECT COST SHARING (Financing and Repayment)
April 22, 1983

INTRODUCTION

The development and management of our Nation's water resources contribute significantly to our social, economic and environmental well being. Investments in water resource development projects and programs have produced diverse and widespread benefits. These benefits include increased employment, national and regional economic development, adequate and safe drinking water supplies, increased agricultural productivity, facilitating important energy development, providing clean and renewable hydropower, transportation diversification, soil and water conservation, flood control, water quality improvement, fish and wildlife enhancement, and recreational opportunities.

Annually, government and private entities spend billions of dollars on the capital cost of water resource development. Non-federal interests already finance the greatest share of these expenditures (approximately 74%). The only comprehensive study of historic expenditures estimated a total national capital outlay through about 1970 of $338 billion. The estimated state and local financing share was 57%, with the federal government financing 26% and private entities 17% (National Water Commission).

Non-federal entities finance the largest share of water resources development, and incur substantial repayment obligations for federally financed projects. For example, non-federal sponsors of federal municipal, industrial, and hydropower development projects are required to repay 100% of the capital and operation and maintenance (O&M) costs allocable to those purposes. Capital and O&M costs associated with irrigation development are being repaid largely without interest.

DISCUSSION

There are certain circumstances in which the federal government has been the most logical source of financing for water resources development. These include situations in which a project, or a series of related projects, creates widespread benefits distributed among several states, provides a good or service available to the public-at-large, meets constitutional or statutory obligations of the national government, serves national purposes in addition to the direct benefits generated, or contributes to the equitable sharing of development opportunities among states within a single river basin. Finally, it has been prudent for the federal government to finance the development of project purposes ancillary to the central federal purpose involved (i.e., multi-purpose project development) in order to maximize the utilization of the Nation's water resources.

These continue to be valid reasons for the federal financing of water resources development. Moreover, the need for projects which fall within these circumstances will grow in the years ahead in the face of continued population growth, energy development, Indian water development issues, sustenance of the Nation's agricultural base, and the maintenance and replacement of existing federal projects. Historical federal commitments to multi-state river basin development plans must also be honored and completed in a timely and equitable manner.

In the face of these growing needs, federal budgetary constraints and inflation have prevented federal investments from keeping pace with funding requirements for construction of on-going and new projects. The result has been a decline in the real dollars available for water resource development, a slowed pace of construction on projects underway, and no new starts for several years.

In the face of these problems, some have suggested that new requirements for non-federal financing should be imposed as a condition of obtaining further federal funding for water resources development. The Western States Water Council has serious and substantial reservations about the practicability and fairness of such proposals. On the other hand, the present hiatus over new federal project starts must be resolved.

The issue of non-federal financing of projects heretofore funded by Congress merits careful consideration. The States, the Congress, the Administration, and other interested parties should all be involved in determining whether there is a necessity for new non-federal financing requirements. The WSWC believes that such determinations should be founded upon certain basic principles, as outlined below.

PRINCIPLES

1. Any new policy should be reasonably consistent across federal agency programs and projects with similar purposes.

2. Any new financing mechanisms or requirements must take into account the financial resources and institutional arrangements available to non-federal entities.

3. New policies should not apply to currently authorized projects.

4. Any policy changes must recognize and fairly consider past federal commitments.

5. Federal water project funding must be timely and consistent over time in order to insure that adequate funding will be available to facilitate prompt initiation and completion of construction.

6. Consideration of increases in non-federal financing should be limited to project purposes which produce vendible private goods and that have identifiable beneficiaries.

7. Project revenues must be returned to non-federal interests in proportion to the financing which such interests provide for the project purpose generating the revenue.

8. The Administration and Congress should encourage non-federal capital formation by providing incentives such as removing restrictions on the use of tax exempt municipal bonds, and establishment of a federal bond guarantee or insurance fund.

STATEMENT BY SENATOR DANIEL K. INOUYE
Before the Subcommittee on Water Resources

Mr. Chairman and members of the Subcommittee, I am pleased to have the opportunity to testify on S. 196, a bill to deauthorize the Kalihi Channel portion of the Honolulu Harbor, which I and my colleague, Senator Matsunaga, have introduced. The objective of the bill is to ensure a free flow of vehicular traffic to and from the Sand Island Terminal Complex at Honolulu Harbor, Hawaii. Deauthorization of the Kalihi Channel would close it to waterborne traffic and allow construction of a fixed bridge to accommodate an ever-increasing volume of commercial land traffic.

As part of the comprehensive development of Honolulu Harbor, Sand Island has been expanded to accommodate additional container handling operations. Because, among other factors, of land availability in the area, the Sand Island facilities have become the primary container handling operations in Honolulu Harbor. The advent of bigger deep-draft vessels and containerization has necessitated an increase of vehicular traffic in and out of the Sand Island complex. S. 196 is intended to facilitate the establishment of an equitable interface between land and sea transportation in the most economical way possible.

Honolulu Harbor has two access channels, the Fort Armstrong Channel, which handles the majority, if not all of the waterborne traffic, and Kalihi Channel. The only overland access to Sand Island is via a draw or bascule bridge which spans Kalihi Channel. Since 1947, when the original study was conducted to justify construction of the present operation at Kalihi Channel, cargo ships with increased freight capacities have been constructed, cargo handling methods have become more efficient, and transocean passenger ship traffic has decreased significantly. In fact, since 1971, only about 30 large cargo or tanker ships have used Kalihi Channel, and the last large vessel which passed through the Channel was in December of 1974. Many of our world ports, including Pearl Harbor, have only a single access channel, and congestion of Honolulu Harbor in the near or long-term future is extremely unlikely.

Commercial land traffic, on the other hand, has increased significantly in accord with the expanded container facilities at Sand Island. It is expected that this traffic will continue to increase concomitant with the further growth of cargo and container handling at Sand Island. In this respect the current situation is again quite different from that in 1947, when the composition of traffic over the bridge was comprised solely of military vehicles. Both the waterborne traffic through the main entrance channel and the commercial land traffic generated by the container-handling facilities at Sand Island over the bascule bridge are integral parts of the maritime commerce system in Hawaii, although it should be stressed that the land traffic component is of equal importance.

The periodic interruption of traffic caused by the opening of the bascule bridge for the relatively few special interest groups who use the facility is not in the best interests of the community as a whole. Delays in moving containers to and from Sand Island can disrupt ship loading and unloading schedules and create unwarranted delays with attendant increases in costs to the people of Hawaii. The interests of the minority who use the Kalihi Channel are of secondary importance to the economic well-being of the general public.

The industrial area at the Sand Island complex accommodates some 100-odd businesses, all of which are heavily dependent on the roadway to Sand Island. While most of these businesses hold permits in lieu of long-term leases, future plans for the area include the development of a marine-oriented industrial park, a foreign trade zone, and a bulk fuel facility. The vehicular traffic generated by these activities will most certainly not decrease. To the contrary, land traffic to Sand Island is expected to increase as much as 80 percent in the near future, and therefore free traffic movement will be extremely critical throughout the day. For this reason, the State of Hawaii Department of Transportation is planning to double the capacity of the bridge to Sand Island to accommodate this traffic by constructing a more economical fixed bridge parallel to the existing bascule bridge. The interconnecting roadways will also be upgraded as part of the Federal-Aid Highway System improvements.

In summary, the factors of drastically reduced waterborne traffic through Kalihi Channel, the increased volume of land traffic over the bascule bridge, the intrinsic costs resulting from the operation of the bascule bridge, the value of the commercial land traffic, and the increased public usage of Sand Island obviate the need for construction of a second bascule bridge, and support the objective of S. 196 to close the bascule bridge to waterborne traffic.

The State of Hawaii has been seeking closure of the bridge since 1972, although it has since become obvious that Federal assistance in the form of legislation such as S. 196 is required. This bill has to my knowledge the full support of the Army Corps of Engineers and the Coast Guard, and more importantly, the people of Hawaii. I respectfully urge my colleagues in your Subcommittee, Mr. Chairman, to give S. 196 full consideration in order that this matter may be resolved as expeditiously as possible.

II

98TH CONGRESS
1ST SESSION

S. 196

To deauthorize the navigation project for the Kalihi Channel at Honolulu Harbor, Hawaii.

IN THE SENATE OF THE UNITED STATES

JANUARY 26 (legislative day, JANUARY 25), 1983

Mr. INOUYE (for himself and Mr. MATSUNAGA) introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works

---

A BILL

To deauthorize the navigation project for the Kalihi Channel at Honolulu Harbor, Hawaii.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That, (a) the navigation project for the Kalihi Channel at Honolulu Harbor, Hawaii, as authorized by section 101 of the River and Harbor Act of 1954, is deauthorized.

STATEMENT BY SENATOR DANIEL K. INOUYE
Before the Subcommittee on Water Resources

Mr. Chairman and members of the Subcommittee, I appreciate the opportunity to testify on behalf of my bill, S. 207, which would authorize the construction, repair, and preservation of certain public works on rivers and harbors for navigation and flood control in the Commonwealth of the Northern Mariana Islands and the Trust Territories of the Pacific Islands, and for other purposes.

During the Senate's deliberations on H.R. 7590 making appropriations for energy and water development for the year ending September 30, 1981, $150,000 was appropriated to the Army Corps of Engineers to begin an investigation of the comprehensive water resource plans and needs of the Commonwealth of the Northern Mariana Islands. Senate Report 96-927 which accompanies H.R. 7590 specifies that this allocation was subject to approval of an authorization.

We have since come full circle, and there is yet to be an authorization for this study. My bill would fill this need by providing an authorization for a total of $4,000,000, or $2,000,000 for each of the two studies in the Trust Territories and the Northern Marianas, respectively.

As most of my colleagues are aware, with the exception of individual project authorizations, there has been no public law since 1976 (P.L. 94-587) that contained project authorizations,

STATEMENT BY SENATOR DANIEL K. INOUYE
Page Two

studies of potential water resource projects, modifications to authorized projects, and other provisions relating generally to the water resources development program of the Corps of Engineers. However, I should point out that during the 96th Congress the House did approve H.R. 4788, entitled the Water Resources Development Act of 1979. This bill did not pass the Senate. Similar to S. 207, H.R. 4788 authorized $2,000,000 for each of the two studies for a total of $4,000,000. I hope that the Senate will choose to act favorably on this matter so that the Corps can begin its work as soon as practicable.

II

98TH CONGRESS
1ST SESSION

S. 207

To authorize the Secretary of the Army, acting through the Chief of Engineers and in cooperation with the governments of the Trust Territory of the Pacific Islands and the Commonwealth of Northern Mariana Islands, to study and draft plans for the development, utilization, and conservation of water and related land resources of such territory and Commonwealth, and for other purposes.

IN THE SENATE OF THE UNITED STATES

JANUARY 26 (legislative day, JANUARY 25), 1983

Mr. INOUYE introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works

---

A BILL

To authorize the Secretary of the Army, acting through the Chief of Engineers and in cooperation with the governments of the Trust Territory of the Pacific Islands and the Commonwealth of Northern Mariana Islands, to study and draft plans for the development, utilization, and conservation of water and related land resources of such territory and Commonwealth, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION. 1. The Secretary of the Army, acting through the Chief of Engineers and in cooperation with the governments of the Trust Territory of the Pacific Islands and the

Commonwealth of the Northern Mariana Islands, is hereby authorized and directed to study and draft plans for development, utilization, and conservation of water and related land resources of such territory and Commonwealth.

Sec. 2. Such studies shall include appropriate consideration of the needs for flood protection; wise use of flood plain lands; navigation facilities; hydroelectric power generation; regional water supply and waste water management facilities systems; general recreational facilities; enhancement and control of water quality; enhancement and conservation of fish and wildlife; and other measures for environment improvement and economic and human resources development. Such studies shall also be compatible with comprehensive development plans formulated by local planning agencies and other interested Federal agencies.

Sec. 3. There is authorized to be appropriated a sum of $175,000 to carry out the provisions of this Act.

Upper
Mississippi River
Basin Association
ILLINOIS, IOWA, MINNESOTA, MISSOURI, WISCONSIN

May 11, 1983

The Honorable James Abdnor
4327 Dirksen Senate Office Building
Washington, D.C. 20510

Dear Senator Abdnor:

Enclosed is a statement on S. 449 prepared by the Upper Mississippi River Basin Association for the Subcommittee on Water Resources hearing on May 17, 1983. The Association urges the subcommittee to consider S. 449 for inclusion in an omnibus water resources bill.

S. 449, introduced by Senator Boschwitz and eight other Senators from our five states, is based largely on the Congressionally authorized Master Plan for the Upper Mississippi River System. S. 449 authorizes a second lock at Lock and Dam 26 and environmental and recreational programs for the river system. These programs are also included in Title II of S. 1171 introduced by Senator Heinz.

The Association hopes that the Subcommittee on Water Resources will give Master Plan recommendations full consideration when including bills for an omnibus water resources bill. Thank you for the opportunity to submit this statement.

Sincerely,

Bill Crews

William Crews
Chairman

WC:mle
Enclosure

ROOM 210
7920 CEDAR AVENUE SOUTH
MINNEAPOLIS, MINNESOTA 55420
PHONE: 612-854-1932

Statement of the
Upper Mississippi River Basin Association
on S. 449

The Upper Mississippi River Basin Association provides a cooperative forum for water resources management in the Upper Mississippi River region. The five states of Illinois, Iowa, Minnesota, Missouri, and Wisconsin have formed this Association to discuss mutual concerns and coordinate water resource programs. S. 449 is a bill which holds particular interest for us because it embodies the recommendations of the Comprehensive Master Plan for the Management of the Upper Mississippi River System.

The Master Plan was submitted to Congress on January 1, 1982. It was prepared by the Upper Mississippi River Basin Commission at the direction of Congress in P.L. 95-502. After that Commission was terminated by Executive Order, this Association was formed. The Association has assumed custodial responsibility for the Master Plan including the distribution of Master Plan documents and the maintenance of all the former Commission's documentation and data from the planning process. Furthermore, this Association is committed to advancing the implementation of all the recommendations contained in that Plan.

The Association has watched with great interest Congressional response to the Master Plan after it was transmitted to Congress over a year ago. We have provided assistance whenever possible in understanding the studies undertaken as part of that planning effort, the importance of the recommendations resulting from those studies, and the overall value of a balanced multi-purpose management approach for the Upper Missisisppi River System.

S. 449 introduced by Senator Boschwitz and a number of other Senators from our five states is based largely on the Master Plan. We believe that this is a particularly important bill for the future of this river system. It not only authorizes many of the programs recommended in the Master Plan, but it is also outstanding in a number of other respects:

1) S. 449 combines into one bill programs to enhance and protect critical habitat areas, programs to monitor the quality and quantity of our important environmental resources, projects to increase recreational opportunities, and a critical navigation project to meet the transportation needs of the Upper Midwest. By virtue of the fact that they are combined in one important piece of legislation, it recognizes the multiple purposes and diversity of needs of the Upper Mississippi River System.

This river system historically has had two Congressional mandates. As a nationally significant ecosystem it has been designated as a national wildlife refuge. As a nationally significant commercial transportation system it is managed as a commercial navigation project. The viability of this system requires a commitment to maintain and enhance all aspects. The sponsors of S. 449 have wisely affirmed this multi-purpose management approach by simultaneously and conjunctively providing for navigation, environmental, and recreational development and enhancement.

2) Section 4(a) of S. 449 sets forth Congressional approval of the Master Plan as a guide for future water policy of the Upper Mississippi River System. Congressional approval of the Plan is one of the most important features of this bill enhancing its overall significance.

As provided in Section 101(i) of P.L. 95-502, Congressional approval of the Master Plan is a necessary condition for its implementation. However, the significance of Congressional approval exceeds this legal necessity. Approval of the plan would demonstrate recognition by Congress of what the Association is committed to and the Commission stressed in the Master Plan -- a balanced approach to multi-purpose system management. Congressional approval of the Master Plan along with the national policy statements contained in Section 2 would provide one of the strongest and most important expressions of national commitment to this major national multi-purpose resource.

In addition, Congressional approval of the Plan would provide a mandate for both Federal and state actions to initiate programs and strategies that the Plan recommends but which do not necessitate specific Congressional authorization. With such a Congressional mandate, the appropriate agencies may begin planning and building the necessary resources within their budgets to proceed with implementation of programs within their existing authority.

3) The legislative package embodied in S. 449 recognizes the dual nature of the river system's needs. There are immediate actions which are necessary as well as long-term planning needs. The immediate needs are obvious -- projected commercial navigation growth beyond 1990 cannot be met by the present system and environmental degradation is seriously threatening precious natural resources. However, the system is dynamic and the complex physical, chemical, and biological relationships are still not well understood. Although the studies conducted as part of the Master Plan made great strides in the area of systemic analysis, long-term investment decisions would be tenuous. In addition to the immediate decisions that must be made, other major decisions will confront us in future years. The ability to respond to future needs with sound judgment depends on our ability to monitor and understand the economic and environmental forces shaping the future of this river system. Thus it is appropriate that the programs authorized in S. 449 include both immediate actions and investments in future understanding.

4) All the programs authorized in S. 449, with the exception of construction of a second lock at Alton, provide for involvement of the five States in this region. The Association firmly believes that a substantial and meaningful role for the states is critical to the success of these programs. The original Master Plan was the result of a unique combination of federal, state, and public judgment. Our Association is committed to this type of cooperative effort in management decisions affecting the Upper Mississippi River System and we offer whatever assistance we can in the future implementation of the Master Plan. We believe strongly in a management partnership which recognizes the federal interests in this river system as well as the state interests. We applaud the authors of S. 449 for building a strong State role in the implementation of these programs, but we recognize that the Governor of each state should ultimately determine which agency or combination of agencies will participate in the authorized programs.

The Upper Mississippi River Basin Association strongly supports the authors of S. 449 in their efforts in implementing Master Plan programs through S. 449. We will not elaborate on the merits of the individual programs contained in this bill. The Master Plan and its thirteen companion technical reports speak more eloquently and authoritatively to those needs. Suffice it to say that the economic, environmental, and recreatonal programs in this bill are essential for both the immediate and long-term needs of the river system.

S. 449 has widespread bipartisan Congressional support. Nine of the ten Senators from our five states have co-sponsored this legislation. We believe it speaks well for this approach that there is such unity of purpose among the leaders who understand the problems and needs of our region so well. We would like to take this opportunity to commend Senator Boschwitz and his colleagues for their dedication to the interests of their respective states and this river basin in putting forth this piece of legislation. Legislation such as S. 449 is critically important for the environmental integrity and economic viability of the Upper Mississippi River System.

98TH CONGRESS
1ST SESSION

S. 449

To authorize the construction of a lock on the Mississippi River in the vicinity of Alton, Illinois and Missouri, and to provide for the coordinated use and enhancement of the Upper Mississippi River System, and for other purposes.

IN THE SENATE OF THE UNITED STATES

FEBRUARY 3 (legislative day, JANUARY 25), 1983

Mr. BOSCHWITZ (for himself, Mr. DANFORTH, Mr. DURENBERGER, Mr. EAGLETON, Mr. PERCY, Mr. JEPSEN, Mr. GRASSLEY, Mr. HUDDLESTON, and Mr. DIXON) introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works

---

A BILL

To authorize the construction of a lock on the Mississippi River in the vicinity of Alton, Illinois and Missouri, and to provide for the coordinated use and enhancement of the Upper Mississippi River System, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SHORT TITLE

SECTION 1. This Act may be cited as the "Upper Mississippi River System Management Act".

DECLARATION OF POLICY

SEC. 2. To ensure the coordinated development and enhancement of the Upper Mississippi River System, the Congress declares that the purpose of this Act is to recognize such System as a nationally significant ecosystem and a nationally significant commercial navigation system. The Congress further recognizes that such System provides a diversity of opportunities and experiences. Such System shall be administered and regulated in recognition of its several purposes.

DEFINITIONS

SEC. 3. For purposes of this Act—

(1) the term "Master Plan" means the Comprehensive Master Plan for the Management of the Upper Mississippi River System, dated January 1, 1982, prepared by the Upper Mississippi River Basin Commission and submitted to the Congress pursuant to the Act entitled "An Act to amend the Internal Revenue Code of 1954 to provide that income from the conducting of certain bingo games by certain tax-exempt organizations will not be subject to tax, and for other purposes", approved October 21, 1978 (92 Stat. 1693; Public Law 95-502), hereafter in this Act referred to as the "Act of October 21, 1978"; and

(2) the terms "Upper Mississippi River System" and "System" mean those river reaches having commercial navigation channels on the following rivers: the Mississippi River main stem north of Cairo, Illinois; the Minnesota River, Minnesota; the Black River, Wisconsin; the Saint Croix River, Minnesota and Wisconsin; the Illinois River and Waterway, Illinois; and the Kaskaskia River, Illinois.

APPROVAL OF MASTER PLAN

SEC. 4. (a) The Congress hereby approves the Master Plan as a guide for future water policy on the Upper Mississippi River System. Such approval shall not constitute authorization of any recommendation contained in the Master Plan.

(b) Section 101 of the Act of October 21, 1978 is amended by striking out the last two sentences of subsection (b) and the last sentence of subsection (j).

CONSENT TO INTERSTATE AGREEMENTS

SEC. 5. (a) The Congress hereby gives its consent to the States of Illinois, Iowa, Minnesota, Missouri, and Wisconsin, or any two or more of such States, to enter into agreements, not in conflict with any law of the United States, for cooperative effort and mutual assistance in the comprehensive planning for the use, protection, growth, and development of the Upper Mississippi River System, and to establish such agencies, joint or otherwise, as they may deem desirable for making effective such agreements.

(b) Each officer or employee of the United States responsible for management of any part of the System is authorized in accordance with such officer's or employee's legal authority to assist and participate, when requested by any agency established under subsection (a), in programs or deliberations of such agency.

AUTHORIZATION OF A SECOND LOCK

SEC. 6. (a) The Secretary of the Army, acting through the Chief of Engineers, is authorized to provide for the engineering, design, and construction, at an estimated cost of $200,000,000, of a second lock at locks and dam 26, Mississippi River, Alton, Illinois and Missouri. Such second lock shall be 110 feet by 600 feet and shall be constructed at or in the vicinity of the location of the replacement lock authorized by section 102 of the Act of October 21, 1978.

(b) There are authorized to be appropriated such sums as may be necessary to carry out the provisions of this section.

MONITORING OF TRAFFIC MOVEMENTS

SEC. 7. (a) The Secretary of the Army, acting in consultation with the Secretary of Transportation and the States in the System, shall monitor traffic movements on the System for the purpose of verifying lock capacity, updating traffic projections, and refining the economic evaluations so as to verify the need for future capacity expansion of the System as well as the future need for river rehabilitation and environmental enhancement.

(b) There are authorized to be appropriated to the Secretary of the Army for the first fiscal year beginning after the date of enactment of this Act, and for each of nine fiscal years following thereafter, such sums as may be necessary to carry out subsection (a) of this section.

PROGRAM AUTHORITY; AUTHORIZATION OF APPROPRIATIONS

SEC. 8. (a) The Secretary of the Interior, in concert with any appropriate State agency, is authorized to undertake with respect to the Upper Mississippi River System, substantially in accordance with the recommendations of the Master Plan—

(1) a habitat rehabilitation and enhancement program to plan, construct, and evaluate projects to protect, enhance, or rehabilitate aquatic and terrestrial habitats lost or threatened as a result of man-induced activities or natural factors;

(2) the implementation of a long-term resource monitoring program; and

(3) the implementation of a computerized inventory and analysis system.

(b) For purposes of carrying out subsection (a)(1), there are authorized to be appropriated to the Secretary of the Interior not to exceed $8,200,000 for the first fiscal year beginning after the date of enactment of this Act, not to exceed $12,400,000 for the second fiscal year beginning after the date of enactment of this Act, and not to exceed $13,000,000 for each of the succeeding eight fiscal years.

(c) For purposes of carrying out subsection (a)(2), there are authorized to be appropriated to the Secretary of the Interior not to exceed $7,680,000 for the first fiscal year beginning after the date of enactment of this Act and not to exceed $5,080,000 for each of the succeeding nine fiscal years.

(d) For purposes of carrying out subsection (a)(3), there are authorized to be appropriated to the Secretary of the Interior—

(1) not to exceed $40,000 for the first fiscal year beginning after the date of enactment of this Act;

(2) not to exceed $280,000 for the second fiscal year beginning after the date of enactment of this Act;

(3) not to exceed $1,220,000 for the third fiscal year beginning after the date of enactment of this Act; and

(4) not to exceed $775,000 for each of the succeeding seven fiscal years.

PROGRAM OF RECREATIONAL PROJECTS; AUTHORIZATION OF APPROPRIATIONS

SEC. 9. (a) The Secretary of the Interior, in consultation with the Secretary of the Army and working through an agency, if any, established by the States for management of the System under section 5 of this Act, is authorized to implement a program of recreational projects for the System and to conduct an assessment of the economic benefits generated by recreational activities in the System.

(b) For purposes of carrying out the program of recreational projects authorized in subsection (a), there are authorized to be appropriated to the Secretary of the Interior not to exceed $500,000 for each of the first ten fiscal years beginning after the date of enactment of this Act and, for purposes of carrying out the assessment of the economic benefits of recreational activities as authorized in subsection (a), there are authorized to be appropriated to the Secretary of the Interior not to exceed $300,000 for the first and second fiscal years and $150,000 for the third fiscal year beginning after the computerized inventory and analysis system implemented pursuant to section 8(a)(3) of this Act is fully functional.

APPLICATION OF NATIONAL ENVIRONMENTAL POLICY ACT

SEC. 10. (a) The Congress finds that there has been reasonable compliance with the provisions of the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.)

in the formulation of the Master Plan and the environmental impact statement on construction of the first lock at locks and dam 26, Mississippi River, Alton, Illinois and Missouri.

(b) The actions authorized in section 6 of this Act are exempt from the provisions of the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.).

ACCOUNTING OF FUNDS

SEC. 11. None of the funds appropriated pursuant to the authorization contained in sections 8 and 9 shall be considered to be attributable to navigation.

TESTIMONY OF SENATOR WILLIAM V. ROTH, JR.

BEFORE THE
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
SUBCOMMITTEE ON WATER RESOURCES
MAY 17, 1983

I am grateful for the opportunity to testify with regard to S. 433, authorizing and directing the Corps of Engineers to relocate the dredge disposal site for spoils from the Christina River in Wilmington, Delaware.

The Port of Wilmington sits at the confluence of the Christina and Delaware Rivers. It is a vigorous and growing facility that has survived and prospered during the past decade. The spoils disposal sites on the north side of the Christina are used in alternate years by the Corps during maintenance dredging. The sites, both located on Cherry Island, will be exhausted within ten years. Fill elevation is already over 40 feet above river level and projected to grow another 10 to 20 feet before abandonment. There are continuing problems as well with dike stability, inability to construct dikes in time for the next dredging cycle, and periodic dike failures as higher heights are attempted.

The Port of Wilmington during the last dozen years has become a major import-export location for motor vehicles, fuel, meats, produce and bulk cargos. A federal cost share has provided construction of a container loader that will bring increased traffic. Critical dredging to keep only 35 foot depth is now undertaken by the Corps every 9 to 11 months.

What is needed now is the start of design and construction of a holding jetty along the Delaware River side of the Wilmington Harbor that will provide a container area for easy, cost effective, spoils disposal over a twenty plus year period. Because the new jetty will create new River side land, Corps and City planners anticipate the possibility of creating two new deep water berths. The creation of these berths could greatly reduce, although not eliminate, the need for costly dredging of the Christina. Environmental assessments and reviews are about complete and state and federal permits seem assured. The Corps now needs the direction of Congress to begin design on the new site. S. 433 would provide that direction.

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II

98TH CONGRESS
1ST SESSION

S. 433

To authorize and direct the Secretary of the Army, acting through the Corps of Engineers, to relocate the Christina River Dredge Spoil Disposal Site.

IN THE SENATE OF THE UNITED STATES

FEBRUARY 3 (legislative day, JANUARY 25), 1983

Mr. ROTH (for himself and Mr. BIDEN) introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works

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A BILL

To authorize and direct the Secretary of the Army, acting through the Corps of Engineers, to relocate the Christina River Dredge Spoil Disposal Site.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of the Army, acting through the Corps of Engineers, is authorized and directed to relocate the site of disposal for dredge spoil from the Christina River in Wilmington, Delaware, from the current location at Cherry Island to a site on the Delaware River between the Wilmington Marine Terminal and Pigeon Point.

STATEMENT TO
SUBCOMMITTEE ON WATER RESOURCES
COMMITTEE ON ENVIRONMENT & PUBLIC WORKS

By
JOHN W. WARNER

S. 455 LONG CREEK CANAL
S. 456 TANGIER ISLAND

ROOM 406 DIRKSEN - 3:30 p.m.

May 17, 1983

INTRODUCTION

MR. CHAIRMAN,

THANK YOU FOR GIVING ME THE OPPORTUNITY TO TESTIFY IN SUPPORT OF S.455, TO MODIFY THE LONG CREEK CANAL PROJECT IN VIRGINIA BEACH, VIRGINIA AND S.456, TO AUTHORIZE THE CORPS OF ENGINEERS TO PERFORM EROSION CONTROL FOR TANGIER ISLAND, VIRGINIA.

I AM JOINED AT THE WITNESS TABLE THIS MORNING BY THE DISTINGUISHED CONGRESSMAN WHO REPRESENTS TANGIER ISLAND, HERB BATEMAN. I AM SUBMITTING FOR THE RECORD A STATEMENT FROM THE MAYOR OF TANGIER ISLAND AND A STATEMENT FROM THE COMMONWEALTH OF VIRGINIA.

CONGRESSMAN BILL WHITEHURST AND THE CITY OF VIRGINIA BEACH ARE SUBMITTING STATEMENTS FOR THE RECORD ON THE LONG CREEK CANAL PROJECT.

MR. CHAIRMAN, I URGE THE SUBCOMMITTEE TO INCLUDE THE PROVISIONS OF S.455 AND S.456 IN ANY OMNIBUS WATER RESOURCES BILL WHICH THE SUBCOMMITTEE MAY REPORT.

MORE

S.456 - TANGIER ISLAND

LET'S FIRST TURN TO S.456 WHICH WOULD AUTHORIZE THE CORPS OF ENGINEERS TO CONSTRUCT A SEAWALL TO PREVENT THE EROSION OF THE ISLAND OF TANGIER.

TANGIER IS LOCATED IN THE MIDDLE OF THE CHESAPEAKE BAY JUST SOUTH OF THE VIRGINIA-MARYLAND STATE LINE. SHORTLY AFTER MY ELECTION TO THE SENATE, I HAD THE OPPORTUNITY TO INSPECT PERSONALLY THE SERIOUS EROSION PROBLEM WHICH THREATENS THE ISLAND'S VERY EXISTENCE. IN 1976, THE ISLAND WAS ERODING AT A RATE OF ABOUT 25 FEET ANNUALLY, AND I AM INFORMED THAT NOW THE ANNUAL EROSION RATE AT TIMES EXCEEDS 35 FEET. THE PROBLEM IS EXTREMELY URGENT!

TANGIER WAS SETTLED BY ENGLISH IMMIGRANTS IN 1686. THE ISLAND'S INHABITANTS ARE DIRECT DESCENDANTS OF THOSE ORIGINAL COLONISTS. THE ISLAND PEOPLE ARE NOW MUCH AS THEY WERE IN EARLIER CENTURIES, SPEAKING WITH OLD ENGLISH ACCENTS AND EARNING THEIR LIVELIHOODS FROM BAY RESOURCES. IN 1978, THE VIRGINIA GENERAL ASSEMBLY DESIGNATED TANGIER A UNIQUE, HISTORICAL AREA.

DURING THE WAR OF 1812, THE ISLAND WAS A STAGING AREA FOR SEVERAL THOUSAND BRITISH TROOPS BETWEEN ATTACKS ON BALTIMORE AND WASHINGTON. FOR LACK OF ANYTHING BETTER TO DO, THE BORED TROOPS CUT DOWN A FOREST. TODAY ISLANDERS CLAIM THAT, IN THEIR LIFETIMES, OLD STUMPS WOULD BE FOUND IN SHALLOW WATER UP TO A MILES OFFSHORE.

MORE

THE COMMONWEALTH OF VIRGINIA CONVENED TWO INTER-AGENCY TASK FORCES TO STUDY THE EROSION PROBLEMS. AFTER INVESTIGATING AN ARRAY OF ALTERNATIVES, THE TASK FORCES RECOMMENDED CONSTRUCTION OF A RIP-RAP SEAWALL ALONG 8200 FEET OF TANGIER'S SHORELINE. THE STATE PAID THE CORPS OF ENGINEERS TO DESIGN THE SEAWALL. THE WALL WILL PROTECT THE ISLAND AIRSTRIP NOW DANGEROUSLY CLOSE TO THE CHURNING WATERS. WHEN ICE COVERS THE BAY, THE AIRSTRIP IS THE ISLAND'S ONLY LINK TO THE MAINLAND. THE WALL WILL ALSO PROTECT THE ISLAND'S WASTEWATER TREATMENT FACILITY.

MR. CHAIRMAN, TIME AND TIDE WAIT FOR NO MAN. THE ARMY CORPS OF ENGINEERS HAS REPORTED, AND I QUOTE: "IF EROSION IS ALLOWED TO CONTINUE, THE ISLAND WILL PROBABLY HAVE TO BE EVACUATED. THE ASSIMILATION OF ITS ROUGHLY 800 INHABITANTS INTO OTHER COMMUNITIES WOULD BE AN IRRETRIEVABLE, BUT UNQUANTIFIABLE CULTURAL LOSS TO THE PEOPLE OF THE UNITED STATES. IN ADDITION, SUCH A MOVE COULD HAVE SERIOUS SOCIAL IMPACT ON THE INHABITANTS."

THE STATE IS WILLING TO DO ITS PART IN PROTECTING THIS UNIQUE HISTORICAL AREA AS WELL AS THE INVESTMENTS IN THE WATER TREATMENT FACILITY AND THE AIRPORT. CONGRESS SHOULD DO ITS PART BY DIRECTING THE CORPS OF ENGINEERS TO CONSTRUCT THE SEAWALL.

I LOOK FORWARD TO WORKING WITH YOU TO PRESERVE THIS VALUABLE PIECE OF AMERICAN HISTORY AND AMERICAN LAND.

MORE

S.455, LONG CREEK CANAL

LET ME GIVE YOU A BRIEF BACKGROUND ON S.455 WHICH WOULD AUTHORIZE THE CHIEF OF ENGINEERS TO PAY THE CITY OF VIRGINIA BEACH $1,630,000 FOR REMEDIAL WORK DONE TO LONG CREEK CANAL IN THAT CITY.

SECTION 101 OF THE RIVER AND HARBOR ACT OF 1962 AUTHORIZED THE EXPENDITURE OF MORE THAN $1 MILLION FOR IMPROVEMENTS IN LYNNHAVEN INLET BAY, AND CONNECTING WATERS IN VIRGINIA BEACH. UNDER THIS AUTHORITY, THE CORPS OF ENGINEERS CARRIED OUT A DREDGING PROJECT IN LONG CREEK CANAL. ONE MAJOR OBJECTIVE OF THIS DREDGING PROJECT WAS TO INCREASE THE TIDAL FLOW IN ORDER TO IMPROVE THE WATER QUALITY AND THEREBY INCREASE SHELLFISH PRODUCTION.

UNFORTUNATELY, THE INCREASED VELOCITY OF THE WATER CAUSED SEVERE SCOUR AND EROSION IN THE CANAL. CITY OFFICIALS FIRST BECAME CONCERNED WHEN THEY DISCOVERED THAT SCOURING HAD CAUSED DEPTHS OF 20 FEET AND MORE IN THE VICINITY OF A BRIDGE THAT SPANS THE CANAL. THE CORPS DREDGING PLANS HAD CALLED FOR A DEPTH OF ONLY 10 FEET, AND THE ADDED DEPTH WAS A REAL THREAT TO THE STABILITY OF THE BRIDGE. STEPS WERE TAKEN TO ALLEVIATE THE IMMEDIATE DANGER TO THE BRIDGE, BUT THESE EFFORTS ACTUALLY WORSENED THE SCOUR IN OTHER PARTS OF THE CANAL.

THE CORPS DREDGING PROJECT ALSO CAUSED EROSION OF THE LAND BORDERING THE CANAL. IN 1972, THE OWNERS OF THIS PROPERTY FILED SUIT AGAINST THE CITY FOR THE DAMAGES THEY HAD SUSTAINED AS A RESULT OF THAT EROSION. ULTIMATELY, A JUDGMENT WAS RENDERED IN FAVOR OF EACH OF THE PROPERTY OWNERS.

MORE

AS A RESULT OF THIS LAWSUIT AND THE SIGNIFICANT SAFETY PROBLEMS CAUSED BY THE SCOUR AND EROSION, THE CITY OF VIRGINIA BEACH WAS FORCED TO UNDERTAKE REMEDIAL WORK IN LONG CREEK CANAL. THE CORRECTIVE MEASURES TO ALLEVIATE THE SCOUR AND SHORE UP THE ERODED BANKS OF THE CANAL WERE COMPLETED IN 1977 AND HAVE PROVEN TO BE QUITE SUCCESSFUL. THE TOTAL COST INCURRED BY THE CITY FOR THE REHABILITATION OF THE CANAL WAS APPROXIMATELY $1.6 MILLION.

THE NORFOLK DISTRICT DIRECTOR OF THE CORPS OF ENGINEERS ACKNOWLEDGES THAT THE ORIGINAL CORPS NAVIGATION PROJECT IN LONG CREEK CANAL HAS CAUSED THE SCOUR AND EROSION WHICH NECESSITATED THE CITY'S REMEDIAL WORK.

THE CORPS DOES NOT HAVE THE AUTHORITY TO REIMBURSE LOCALITIES FOR REMEDIAL WORK UNDERTAKEN AT THEIR OWN EXPENSE. SECTION 111 OF THE RIVER AND HARBOR ACT OF 1968 AUTHORIZES THE CORPS ITSELF TO PERFORM REMEDIAL WORK, BUT IT SPECIFICALLY PROHIBITS THE CORPS FROM REIMBURSING A LOCALITY EVEN THOUGH THE CORRECTIVE ACTION TAKEN BY THE LOCAL GOVERNMENT WAS NECESSITATED BY A FAULTY CORPS PROJECT. CONSEQUENTLY, THE CONGRESS MUST PASS AUTHORIZING LEGISLATION TO PROVIDE FINANCIAL RELIEF TO THE CITY OF VIRGINIA BEACH.

I HOPE THE SUBCOMMITTEE WILL INCLUDE THE PROVISIONS OF S.455 IN APPROPRIATE WATER RESOURCES LEGISLATION THIS YEAR. FAILURE TO APPROVE THIS BILL WOULD CONTINUE TO FORCE THE TAXPAYERS OF VIRGINIA BEACH TO CARRY THE BURDEN OF PAYING FOR A PROJECT WHICH THE CORPS OF ENGINEERS ITSELF HAS ADMITTED BECAME NECESSARY AS A RESULT OF A PREVIOUS, AND FAULTY, CORPS NAVIGATION PROJECT.

****

TOWN OF TANGIER
TANGIER, VIRGINIA 23440

May 12, 1983

The Honorable John W. Warner
United States Senate
Washington, DC 20510

Re: S. 456 - Chesapeake Bay Erosion Control Products

Dear Senator Warner:

I, speaking for the concerned residents of Tangier Island, appreciate your concern and interest that you have shown toward the erosion problem on Tangier and its western side.

Since the short time frame, it was advised and recommended by you office that I submit a letter for record, if it was not feasible for me to attend this subcommittee hearing on May 17, 1983. I am more than sure that your representation for me will be more that I could offer at this hearing.

If something to prevent this erosion on the western side of our unique island is not done shortly, the residents that live on the western side of the island face the grim danger of watching their homes and property washed into the bay. This would have to be witnessed to see the true danger of this possibility. No one wants their home town washed into the bay, then face the task of relocating to the mainland. Many of the older people would not probably surive this relocation.

Tangier has almost completed the project of installing a sewerage treatment plant on the island. The treatment plant is located on the western side of the island, and tragically the sea shore is located approxiamely 30 to 40 feet from this plant. The cost of this project is approximately $4 million dollars, financed 99% by the Federal Government (E.P.A. & H.U.D.).

Tangier's fine airport also faces much the same situation. The location of this project is also on the west side of the island, and the southern tip of this airport is almost at water's edge. This is another project funded by the Federal Government in its entirety. This airport is a vital link to the mainland for us. During the winter months when the Chesapeake Bay is frozen and permits no passage by boats which we depend, this airport is the only link that we have to the mainland. Also during emergencies, it is the most rapidly means of transportation to get off the island.

Page No. 2

As you can see, this is many of the taxpayers money facing the grim possibility being qashed away.

We are proud of this island, it is home. It is a place where we are born and raised, and have grown to be found of this place. We humbly plead that you will give every consideration to help us prevent this massive erosio n from taking our island away from us. Over the past few years, this erosion has been taking place at approximately 22 feet per year.

So I, representing Tangier's concerned citzens, ask that you will look deep into this matter, and reward us with a project that will prohibit the taking of our island, our beloved island, our home.

May God bless you and be with you as you make this decision.

Sincerely,

Danny McCready

Danny R. McCready
Mayor, Town of Tangier

Testimony for the Senate Committee on
Environment and Public Works,
Subcommittee on Water Resources
by the Honorable Louis R. Jones, Mayor,
City of Virginia Beach, Virginia

May 17, 1983

I am pleased to provide the strong endorsement of the Virginia Beach City Council for the passage of S. 455, introduced by Senator John W. Warner. This bill would authorize the Secretary of the Army, acting through the Chief of Engineers, to pay the City of Virginia Beach, Virginia $1.63 million for the remedial work done to Long Creek Canal, which the City was required to carry out as a result of a federal navigation dredging project performed by the Army Corps of Engineers in 1965.

Under the authority of the River and Harbor Act of 1945, the Corps of Engineers undertook the Lynnhaven Dredging Project to alleviate shoaling at the entrance to Broad Bay for the express purpose of enhancing the navigability of these waters and of increasing tidal flow therein so the optimum shellfish growth in Broad Bay could be obtained. The Long Creek Canal, a channel ninety (90) feet wide and nine (9) feet deep, was constructed as part of this project.

The design depth for Long Creek Canal as determined by the Corps was ten (10) feet. However, following completion of the initial dredging, periodic soundings indicated that scouring and erosion were taking place and, in certain locations, the channel depth had increased to as much as forth-three (43) feet. In 1972, the City was sued by several property owners whose land bordered the canal, claiming they had been damaged because the front of their property and bulkhead facing the canal had eroded as a result of the strong currents and tidal action. Testimony at the trial indicated that the Corps of Engineers had the sole responsibility for the design and planning of the dredging project. However, bottom scour and shore erosion problems were completely unanticipated by the Corps during the planning stages, and studies were not directed to these areas. Based upon the testimony of expert witnesses, it was evident that the design of the Corps' dredging project did, in fact, cause the scouring which resulted in bulkhead deterioration and shoreline erosion.

Faced with the conditions which existed as to the stability of the bridge over Long Creek and the continuing erosion of the shoreline, in 1975, the City of Virginia Beach committed itself to implementing corrective remedial measures to decrease the current velocities and to alleviate the scour problem. The rehabilitation of the canal, which included installation of bulkheading and riprap along each side of the canal to the west and east of the bridge, was completed in 1977, at a total cost to the City of approximately $1.66 million. The completed project has more than fulfilled our expectations. The erosion of the canal banks has been eliminated, the velocity of the water has been reduced, and the canal is less hazardous.

The Corps of Engineers has recognized that the scour and erosion which necessitated the remedial work were caused by the Corps' dredging of the Long Creek Canal as a part of its 1965 Federal Navigation Project. Since 1977, we have been seeking legislation which would authorize the Corps to reimburse the City of Virginia Beach for the remedial work done to Long Creek Canal, necessitated by the Corps of Engineers dredging project. The Corps acknowledges its responsibility in creating the need for this remedial work and supports our request for reimbursement. Unfortunately, current law does not allow the Corps to reimburse the City directly for our project costs. Therefore, we strongly urge your support for S. 455, which will allow the Corps of Engineers to reimburse the City of Virginia Beach for the remedial work done to Long Creek Canal necessitated by the Corps of Engineers' dredging project.

STATEMENT OF THE HONORABLE HERBERT H. BATEMAN BEFORE THE WATER RESOURCES SUBCOMMITTEE OF THE SENATE ENVIRONMENT AND PUBLIC WORKS COMMITTEE

MR. CHAIRMAN. I APPRECIATE THE OPPORTUNITY TO JOIN THE SENIOR SENATOR FROM VIRGINIA IN ENDORSING THIS MUCH NEEDED EROSION CONTROL PROJECT ON TANGIER ISLAND.

THIS PROJECT WAS PREVIOUSLY APPROVED BY THE HOUSE AS SECTION 103 OF THE WATER RESOURCES DEVELOPMENT ACT OF 1979, LEGISLATION WHICH NEVER RECEIVED FINAL CONGRESSIONAL ACTION.

SINCE DISCUSSION OF THIS PROJECT BEGAN IN 1978, EROSION OF THE CHESAPEAKE BAY ISLAND HAS NOT SLOWED, AND PROMPT ACTION IS NOW IMPERATIVE, IF THE UNIQUE COMMUNITY ON THE ISLAND IS TO BE SAVED. THE INHABITANTS ARE DIRECT DESCENDANTS OF EARLY ENGLISH SETTLERS. LIKE THEIR 17TH CENTURY FORBEARS, THE 20th CENTURY ISLANDERS SPEAK WITH AN ELIZABETHAN ACCENT, AND MAKE THEIR LIVING OFF THE RESOURCES OF THE BAY. FORCING THE MEMBERS OF THIS TRADITIONAL COMMUNITY OFF THE ISLAND WOULD CAUSE GRAVE SOCIAL AND ECONOMIC HARDSHIPS FOR THEM, AND WOULD SIGNIFICANTLY DIMINISH THE DIVERSITY OF AMERICA'S CULTURAL HERITAGE.

THE EROSION OF THE ISLAND ALSO THREATENS TWO FEDERALLY FUNDED CONSTRUCTION PROJECTS, A WATER TREATMENT PLANT AND AN AIRPORT. THE WATER TREATMENT PLANT, CURRENTLY UNDER CONSTRUCTION, HAS BEEN FUNDED WITH $3.5 MILLION FROM THE ENVIRONMENTAL PROTECTION AGENCY, AND THE DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT. THE AIRPORT HAS RECEIVED $1.2 MILLION IN FEDERAL FUNDS DURING SEVERAL PHASES OF CONSTRUCTION OVER THE LAST 15 YEARS. TO ALLOW THIS SUBSTANTIAL FEDERAL INVESTMENT TO BE ENDANGERED WOULD, OF COURSE, BE MOST UNFORTUNATE.

AGAIN, LET ME THANK YOU FOR THE OPPORTUNITY TO PRESENT THIS PROJECT TO THE COMMITTEE. I CERTAINLY LOOK FORWARD TO SEEING POSITIVE ACTION ON THIS AND OTHER WATER RESOURCES PROJECTS IN THIS CONGRESS.

98TH CONGRESS
1ST SESSION

S. 455

To modify the navigation project for Lynnhaven Inlet, Bay, and connecting waters, Virginia.

IN THE SENATE OF THE UNITED STATES

FEBRUARY 3 (legislative day, JANUARY 25), 1983

Mr. WARNER (for himself and Mr. TRIBLE) introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works

---

A BILL

To modify the navigation project for Lynnhaven Inlet, Bay, and connecting waters, Virginia.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the navigation project for Lynnhaven Inlet, Bay, and connecting waters, Virginia, authorized by section 101 of the River and Harbor Act of 1962 (76 Stat. 1173, 1174) is hereby modified to authorize and direct the Secretary of the Army, acting through the Chief of Engineers, to pay the city of Virginia Beach, Virginia, $1,630,000 for remedial work to Long Creek Canal which the city was required to carry out as a result of such navigation project.

98TH CONGRESS
1ST SESSION

S. 456

To authorize the Secretary of the Army, acting through the Chief of Engineers, to carry out certain erosion control projects in the Chesapeake Bay, Virginia.

IN THE SENATE OF THE UNITED STATES

FEBRUARY 3 (legislative day, JANUARY 25), 1983

Mr. WARNER (for himself and Mr. TRIBLE) introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works

---

A BILL

To authorize the Secretary of the Army, acting through the Chief of Engineers, to carry out certain erosion control projects in the Chesapeake Bay, Virginia.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That (a) the Secretary of the Army, acting through the Chief of Engineers, in order to protect the cultural, economic, environmental, and historical resources of Tangier Island, Virginia, located in Chesapeake Bay, is authorized and directed to design and construct the following erosion control project.

(b) A structure approximately eight thousand two hundred feet in length on the western shore of Tangier Island, adequate to protect such island from further erosion.

SEC. 2. The project shall be carried out on an emergency basis and no study or other requirement of this Act or of any other law which would otherwise be applicable to the project shall apply to the project except that, prior to construction, local interests shall provide without cost to the United States all necessary lands, easements, rights-of-way, and relocations, agree to operate and maintain the structures after construction, and hold and save the United States free from damages due to the construction works.

TESTIMONY
BEFORE
THE SUBCOMMITTEE ON WATER RESOURCES OF
THE SENATE COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
ON S.708

John D. Kramer, Secretary of the Illinois Department of Transportation (IDOT), 2300 South Dirksen Parkway, Springfield, Illinois 62764, respectfully submits the following testimony for the record.

S.708 proposes amendments to the Watershed Protection and Flood Prevention Act (PL 83-566). This act is the basic law governing U.S. Soil Conservation Service planning and financial assistance to state and local governments for implementation of watershed plans. Included in S. 708 are provisions which would require that at least 20 percent of project benefits are agricultural related and that project authorizations be made by the full Congress. IDOT opposes these two provisions.

IDOT's Division of Water Resources cooperates extensively with the SCS in the assessment, planning, and mitigation of urban flood damages. These cooperative programs are a major part of SCS operations in Illinois.

The SCS is the only federal agency presently authorized to provide urban flood damage reduction assistance in the metropolitan region of Chicago. The program is playing a very important role in Chicago area flood control. The Upper Salt Creek watershed project, an SCS project authorized in 1974, is nearing completion; The Little Calumet River watershed project, authorized in 1982, will soon be underway; and the Lower Des Plaines River watershed plan will be completed at the field level and undergo review for authorization this summer. All of these projects would have been prohibited by the provision of S. 708 requiring that at least 20 percent of the benefits be related to agriculture. The federal government would continue to bear heavy financial outlays for flood insurance claims and disaster assistance under this proposal.

Fortunately, the SCS program has been available to address these severe urban flood problems. SCS technical and financial assistance has been a catalyst to mobilize state and local resources in a unified effort to reduce flood damages. We are working together to implement a single cooperative plan, rather than relying on piecemeal efforts as is so often done in metropolitan areas.

IDOT also opposes the provision of S. 708 which would require that the full Congress authorize all projects costing more than $10 million. Currently, projects of this scale must receive Committee approval. We believe that the existing procedure provides ample oversight without significantly delaying projects. Authorization by the full Congress could build major delays into the approval process, particularly in light of the difficulty of passing water project authorization bills in recent years.

Therefore, I urge Congress to reject the proposed requirements for 20 percent agricultural benefits and full Congressional authorization for SCS PL 83-566 projects. Adoption of these two provisions would seriously undermine the effectiveness of a uniquely successful flood damage reduction program.

Thank you for the opportunity to present our views on this important issue.

II

98TH CONGRESS
1ST SESSION

S. 708

To improve the operations of certain water resources projects.

IN THE SENATE OF THE UNITED STATES

MARCH 8 (legislative day, MARCH 7), 1983

Mr. DOMENICI introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works

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A BILL

To improve the operations of certain water resources projects.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the second sentence of the definition of "works of improvement", contained in section 2 of Public Law 83-566, as amended, is further amended by adding after "$250,000" the following: "but not more than $10,000,000, for any projects submitted to the Committee on Environment and Public Works of the Senate and the Committee on Public Works and Transportation of the House of Representatives: *Provided,* That any project with an anticipated Federal cost exceeding $10,000,000 must be authorized by Act of Congress."

SEC. 2. Section 2 of Public Law 83-566, as amended, is further amended by deleting the period and inserting a colon at the conclusion of the proviso, and adding the following: "*And provided further*, That each such subject must contain benefits directly related to agriculture that account for at least 20 per centum of the total benefits of the project."

SEC. 3. The Secretary of Agriculture, acting through the Administrator of the Soil Conservation Service, shall study and report to the appropriate committees of the Senate and the House of Representatives by April 1, 1984, on the feasibility, the desirability, and the public interest involved in requiring that full public access be provided to all water impoundments that have recreation-related potential and that were authorized by Public Law 83-566, as amended.

STATEMENT OF SENATOR HOWELL T. HEFLIN
TO THE COMMITTEE ON WATER RESOURCES ON THE
FORT TOULOUSE EROSION CONTROL ACT OF 1983 AND
MOUND STATE PARK EROSION CONTROL ACT OF 1983

MAY 17, 1983

MR. CHAIRMAN, I DEEPLY APPRECIATE THIS OPPORTUNITY TO TESTIFY TODAY BEFORE THE COMMITTEE ON WATER RESOURCES ON TWO PROJECTS THAT ARE VERY IMPORTANT TO THE PEOPLE OF THE STATE OF ALABAMA. BOTH HAVE TO DO WITH RIVERBANK STABILIZATION AND CONTROL PROBLEMS AT HISTORICAL SITES IN MY STATE.

THE FIRST SITE, FORT TOULOUSE, WAS APPROPRIATED $1,000,000 FROM CONGRESS IN FISCAL YEAR 1980 FOR ADVANCE ENGINEERING AND DESIGN WORK. THESE FUNDS ARE STILL BEING HELD IN ESCROW PENDING AUTHORIZATION OF THE PROJECT. IN FACT, THE AUTHORIZATION DID PASS THE FULL SENATE SOME THREE OR FOUR YEARS AGO, BUT BECAUSE OF TIMING AND OTHER CONSIDERATIONS, IT WAS NOT REACHED FOR ACTION IN THE HOUSE PRIOR TO THE ADJOURNMENT OF THE 95TH CONGRESS.

I SHOULD LIKE TO POINT OUT, MR. CHAIRMAN, THAT IN 1978 THEN SECRETARY OF THE INTERIOR ANDRUS WROTE TO THE CHAIRMAN OF THE HOUSE COMMITTEE ON ENERGY AND NATURAL RESOURCES IN 1978 IN SUPPORT OF FORT TOULOUSE STABILIZATION PROJECT STATING, "IT IS CLEAR THAT EMERGENCY STABILIZATION WORK IS URGENTLY NEEDED TO PREVENT FURTHER LOSS TO THE PREHISTORIC AND HISTORIC RESOURCES OF THIS NATIONALLY SIGNIFICANT SITE."

THE SITE IS OBVIOUSLY OF CONSIDERABLE ARCHEOLOGICAL, HISTORICAL AND CULTURAL SIGNIFICANCE AND INTEREST. THE AREA WAS ORIGINALLY SETTLED BY PREHISTORIC INDIANS, ABOUT 9,000 YEARS AGO, WHO CLUSTERED INTO VILLAGES AND BUILT FIVE CEREMONIAL BURIAL MOUNDS. THE LAND SUBSEQUENTLY WAS TAKEN BY THE SPANIARDS. THEY WERE SUCCEEDED BY THE COLONIAL FRENCH, WHO ESTABLISHED A FORTIFIED TRADING AND LISTENING POST AT THIS SITE, STRATEGICALLY LOCATED AT THE BOUNDARY BETWEEN THE FRENCH - AND BRITISH - CLAIMED TERRITORIES, AND WHO NAMED IT FORT TOULOUSE. THE FORT FELL INTO BRITISH HANDS FOLLOWING THE FRENCH AND INDIAN WAR, AND THEN BECAME AN AMERICAN HOLDING FOLLOWING THE REVOLUTIONARY WAR.

BUT THE FACT IS THAT THE RIVER IS EATING AWAY AT THE BANK AT A VERY RAPID RATE, AND IF WE DON'T DO SOMETHING IMMEDIATELY, THERE'S NOT GOING TO BE ANY ARCHEOLOGICAL INDIAN MOUNDS AND THERE IS NOT GOING TO BE ANY FORT THERE FOR THE PEOPLE TO SEE, BECAUSE THE BANK KEEPS SLOUGHING AND FALLING INTO THE RIVER AT AN ALARMING RATE. THE SHIFTING OF THE BANKS OF THE COOSA RIVER WHICH IS CAUSING THIS PROBLEM, MAY VERY WELL BE THE RESULT OF CORPS OF ENGINEER PROJECTS ON THE ALABAMA COOSA RIVER SYSTEM.

THE PROBLEM HAS REACHED CRISIS PROPORTIONS AND IMMEDIATE ACTION WITHOUT FURTHER DELAY IS CLEARLY REQUIRED IF THIS HISTORICAL TREASURE IS TO BE PRESERVED.

In an effort to preserve this historical site, the Fort is presently being reconstructed according to the original plans which were obtained from France. A tremendous amount of archaeological excavation has taken place and the State of Alabama has spent in excess of $500,000 to preserve this site. Mr. Chairman, I would like to also submit for the record prepared statements from Congressmen Dickinson and Nichols, who strongly support this measure.

I am requesting today that the Subcommittee incorporate the language of S.850 in the final draft on the Water Resources Development Act of 1983 (S.947). The Corps of Engineers must be given the authority to take the necessary corrective action at an early date to halt the ruination of this tremendous historical resource.

A no less serious problem exists in Elmore County at the Mound State Park in Moundville, Alabama. My bill (S.878) is vital to the preservation of this integral segment of our nation's history. The Mound State Park harbors a wealth of history that is invaluable to Alabama and to our nation. This park contains numerous Indian burial mounds and relics which have provided tremendous insight into the customs and folklore of the American Indian.

Presently this park is being threatened by the erosion of the banks of the Warrior River which runs adjacent to the Indian Mounds. The deterioration of

This property must be stopped to ensure the safekeeping of this historical landmark.

A corps of Engineers on-site inspection in 1981 revealed that 2400 feet of riverbank needed to be protected in order to prevent a loss of these cultural resources. The erosion of this shoreline has caused the loss of cultural resources and this loss is anticipated to continue to increase in magnitude as it approaches the Indian Mounds.

It has been estimated that the riverbank at Mound State Park can be efffectively stabilized for a cost of about $4 million. A comparatively small price to pay for the preservation of such an important historical and educational landmark. Appended to my prepared statement is the report prepared by the Corps which outlines what corrective steps must be taken in order to protect the integrity of this historical site. I will also include for the record an historic document on Moundville prepared by Dr. Carl E. Guthe, the former director of the New York State Museum's which attests to the historical and educational significance of the Mound State Monument as well as an excerpt taken from a book entitled Alabama: A Guide To The Deep South, which was very appropriately compiled by workers of the writers' program of the Work Projects Administration in 1941. In addition, I have included for the Committee's information a statement of support from Congressman Richard Shelby whose district

INCLUDES MOUNDVILLE AND A STATEMENT OF MR. VICTOR P. POOLE OF MOUNDVILLE, ALABAMA.

MR. CHAIRMAN, I CANNOT OVEREMPHASIZE THE IMPORTANCE OF THESE TWO NATIONAL HISTORICAL LANDMARKS TO THE STATE OF ALABAMA'S AND OUR NATION'S CULTURAL HERITAGE. TO ALLOW THESE SITES TO BE LOST DUE TO THE ACCELERATED EROSION OF THE BANKS OF THESE RIVERS WOULD INFLICT IRREPAIRABLE DAMAGE UPON OUR UNDERSTANDING AND APPRECIATION OF THE HERITAGE OF OUR NATION. I DO HOPE THAT THE COMMITTEE WILL ACT FAVORABLY ON BOTH OF THESE MEASURES.

THANK YOU MR. CHAIRMAN.

SAMEN-P
1 March 1982
Russ/3446

FACT SHEET

Project: Fort Toulouse, Alabama (Bank Stabilization)

Authorization: Not Authorized

Purpose: Bank Stabilization and Erosion Control

Location: The project is located on the Coosa River at the confluence of the Tallapoosa River in Elmore County, Alabama.

Discussion: Fort Toulouse is located on a peninsula formed by the confluence of the Coosa and Tallapoosa Rivers near Montgomery, Alabama. Registered as a National Historic Landmark, the site was first settled by prehistoric Indians who at one time built five ceremonial mounds on the left bank of the Coosa. The land subsequently passed to the Spanish and then the French, who built Fort Toulouse in 1717.

Historical records and maps indicate that the north and western portions of the site have long been subject to severe erosion and bank sloughing, seriously endangering the single remaining Indian mound and Fort Toulouse itself, which is being restored by the State of Alabama.

The Corps of Engineers conducted a succession of preliminary geologic and planning studies in 1974 concerning the erosion problems at the site. It was concluded that the sloughing problem is due to normal erosion processes, combined with unstable foundation conditions.

Bank sloughing continues to encroach on Fort Toulouse and the Indian mound. Several alternatives to protect the historic features threatened by the bank sloughing have been investigated by the Corps of Engineers. However, the Corps of Engineers lacks authority or funding to accomplish any bank stabilization.

A House of Representatives Bill (H.R. 2050) dated 24 February 1981 to authorize the Secretary of Army to correct certain slope failures and erosion problems along the Coosa River was introduced in February 1981 by Congressman Nichols (for himself and Congressman Dickinson) and was referred to the Committee on Public Works and Transportation. Also, a Senate Bill (S 1234) dated 20 May (legislative day 27 April) 1981 to authorize the Secretary of Army to correct certain slope failures and erosion problems along the banks of the Coosa River was introduced by Senator Heflin and was referred to the Committee on Environment and Public Works.

It has been roughly estimated that a cost of approximately $26,000,000 would be required for this work. Congress included $1,000,000 in FY 1980 appropriation bill for advance E&D.

SAMEN-P
1 March 1982
Russ/3446

FACT SHEET

Project: Mound State Park, Moundville, Alabama

Authorization: Not authorized.

Purpose: Bank Stabilization and Erosion Control

Location: The project is located in Mound State Park on the left bank of Black Warrior River near navigation mile 304 in Tuscaloosa County, Alabama, 19 miles south of Tuscaloosa, Alabama.

Discussion: The left bank on the Black Warrior River is sloughing and eroding and endangering the Park's cultural resources and some of its structures at this historical site.

The investigations of the problem was completed 20 July 1981. Investigations revealed that the river bank soil becomes saturated with water during high water conditions on the Black Warrior River. When the water level recedes, the water level in the bank tries to fall with the river but is unable to drain quickly enough and drawdown failures result.

The erosion investigation was accomplished with O&M General Funds in accordance with paragraph 14.g. of ER 1105-2-460 "Identification and Administration of Cultural Resources" at an estimated cost of $20,000.

It is estimated that a cost of approximately $4,120,000 will be required for bank stabilization and erosion control.

TESTIMONY OF CONGRESSMAN WILLIAM L DICKINSON
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
SUBCOMMITTEE ON WATER RESOURCES
May 17, 1983

Mr. Chairman,

I appreciate this opportunity to voice my strong support for legislation that will authorize funds for the preservation of Fort Toulouse, Alabama.

Fort Toulouse is a very important historical site which was built by the French in 1717. As part of the general area, the Indians had built three tremendous burial grounds which anteceded the building of the fort by several hundred years. The fort is being reconstructed in its original form. There has been a tremendous amount of archeological excavation.

The fort is at the confluence of two rivers. In recent years, the river has been eating away at the bank at a very rapid rate.

We are certain that if nothing is done within the next year or so, there is not going to be anything left to preserve. This is an historical asset of our state and of our nation. It cannot be replaced.

There is only one entity in the entire country that is capable of keeping this site from washing away, and that is the Corps of Engineers.

It is important therefore that we authorize the money so that the Corps of Engineers can perform the work necessary to preserve this important historical asset to the country as well as the State of Alabama.

Again, I appreciate having an opportunity to urge that favorable action be taken on the legislation that will authorize the funds for this project in this fiscal year. Thank you.

DEPARTMENT OF THE ARMY
MOBILE DISTRICT, CORPS OF ENGINEERS
P. O. BOX 2288
MOBILE, ALABAMA 36628

REPLY TO
ATTENTION OF:

SAMEN-P

15 October 1982

OFFICE OF SENATOR HEFLIN
1982 OCT 25 PM 12:38

Honorable Howell T. Heflin
United States Senate
Washington, DC 20510

Dear Senator Heflin:

In response to your question concerning the bank erosion problems at Mound State Park on the Warrior River near Moundville, Alabama which was expressed during our 27-28 September 1982 visit with you in Washington, D.C., inclosed you will find a report addressing this problem. This study was prepared in July 1981 and offers corrective measures and provides a cost estimate reflecting site conditions and price levels in 1981. Changes in site conditions could have occurred since this study was prepared. This Park is a National Historical Landmark owned by the State of Alabama. The Corps of Engineers does not have authority to participate in a project such as this. In order to provide authority for the project, a Public Law similar to that proposed in H. R. 2814 for Fort Toulouse National Historic Landmark Park would be required.

If we can be of further assistance concerning this Park, do not hesitate to contact me.

Sincerely,

Patrick J. Kelly
PATRICK J. KELLY
Colonel, CE
District Engineer

1 Incl
As stated

SAMEN-YD 20 July 1981

MEMORANDUM FOR RECORD

SUBJECT: Report on Stabilization of Bank Erosion at Mound State Park on the Warrior River near Moundville, Alabama

INTRODUCTION

1. During July 1977, Mr. Clurin Reed of the Alabama Department of Conservation contacted the Mobile District by telephone and requested asistance in identifying causes of severe bank erosion at the Mound State Park. He especially wanted to know what, if any, effects were attributed to the Corps' navigation project on the Warrior River and what assistance the Federal Government could provide in halting the erosion. Mr. Reed's interest in this erosion problem had been aroused because of inquiries by Dr. Herbert Boschung, the Director of the Alabama Museum of Natural History.

2. As a result of these requests, engineers from the Mobile District Office and the Tuscaloosa Area Office met at Mound State Park on 10 August 1977. Also present were representatives of the Alabama Department of Conservation and the University of Alabama. It was determined from this trip that the rate of bank erosion was not affected by the federal navigation project. Subsequent investigation failed to reveal any existing authority under which bank stabilization could be performed and this information was passed along to Mr. Reed and to Dr. Boschung.

3. During February 1979, Congressman Walter Flowers inquired about the Corps' ability to assist in bank stabilization at this historic site, but he was similarly informed that the Mobile District had neither the funds nor the authority to participate in such a project.

4. In response to an OCE telecon in July 1979, an extremely rough cost for bank stabilization was prepared for an "order of magnitude" estimate. A federal cost of $2,500,000 was estimated at that time without benefit of surveys.

5. Further inquiries were received in October 1979 from Congressman Tom Bevil's staff regarding bank erosion at Mound State Park. As a result of this continued Congressional interest, the District Engineer directed this study to better determine the problems and costs associated with stabilization of this area. This study will provide a basis for a plan of action should the district receive authority from Congress to protect this valuable cultural resource.

6. During November 1980, hydraulic and soils engineers inspected the site again with Mr. Carey Oakley, Director of the Office of Archeological Research at Mound State Park and with Mr. Joe Vogel, Director of Alabama Museums. The purpose of this inspection was to determine the extent of protection required and the most appropriate methods of providing this protection. Surveys were subsequently made and completed in February 1981.

EXTENT OF STUDY

7. The November 1980 site visit revealed that approximately 2400 feet of riverbank need to be protected to prevent loss of cultural resources. It will require the use of at least two different methods of bank protection. The upstream portion of the stabilization system can be accomplished by the relatively inexpensive method of bank grading and armoring with riprap. The downstream portion of the project does not have enough room available to regrade the bank to flatten slopes and must be protected by a barrier of sheet pile cells. Discussions between engineers of various disciplines have narrowed the most likely alternatives to the scheme presented herein. Should authority later be granted to proceed with this project, then other alternatives should be developed for cost comparisons; but it is not likely that a significantly different plan would be recommended.

8. The surveys obtained are sufficiently detailed to allow the project quantity estimates to be made with confidence. Some soils investigations will be required, however, to insure that the sheet pile protection can be constructed as envisioned. It is not anticipated that any soils conditions exist at the site which would prevent the driving of the sheet piles.

PRIOR REPORTS AND INVESTIGATIONS

9. The history of the district's involvement in the bank erosion problem at Mound State Park can be seen through the correspondence on file. Previous estimates and analysis have merely been based on quad sheets of the area and earlier field trips. The detailed surveys made in 1981 provide a sound basis upon which the proposed plan and cost estimates can be made.

DESCRIPTION OF THE STUDY AREA

10. Mound State Park is located on the left bank of the Warrior River near navigation mile 304. The park is located on the outside of a sharp bend in the Warrior pool. This reach is characterized by high steep banks that exhibit severe active erosion. The primary mode of slope failure is by "sudden drawdown" effects associated with receding floods. The material which sloughs off the banks accumulates at the toe of the slope, but it is quickly carried away by the high velocities normally found on the outside of river bends.

11. The active erosion occurs over a reach of about 2300 feet. The erosion of this area has caused the loss of cultural resources and this loss is expected to increase in magnitude as the erosion progresses toward the indian mounds. Furthermore, existing structures, such as a concrete block conference building, are now threatened by the erosion and will likely be lost in the near future if steps are not taken to stabilize the bank.

SAMEN-YD 20 July 1981
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RECOMMENDED PLAN

12. In order to stabilize a bank which is eroding in the manner exhibited here, it is necessary either to grade the slope back where it can drain better and not have the overburden weight which drives the failure process, or to put in a cutoff wall to intercept the failure plane.

13. It is necessary at Mound State Park to employ both methods of stabilization because of physical and monetary constraints. The most inexpensive method is to grade the slope to 1V on 3H or flatter and armor the lower portion of the slope with riprap to prevent erosion by high velocity flow during floods. This is not feasible, however, for the lower 800 feet because of the existance of permanent structures which should be saved. In this area it is necessary to construct a barrier of cells with steel sheet piling. These two methods are shown on Plate 2.

14. The graded slope and riprap would extend for about 1600 feet. The riprap would terminate at elevation 130 which is about the elevation of the flood of record for this site. A stone toe dike would be constructed at the base of the slope. This mass of stone will serve to anchor the slope and protect against wave and current attack. Moreover, it will supply a source of armor stone for the underwater slope as velocities try to undermine the protected area. Over a period of time this toe dike will degrade and it may be necessary to add more stone in this area in the future. The portion of the slope above elevation 130 would be grassed to prevent erosion. Surveys indicate that the slopes in this area can be regraded to the desired slopes without use of borrow material and without creating an excess of material. The 12-inch thick riprap should be placed on 6 inches of bedding material over filter cloth.

15. The sheet-pile cells will be constructed of contractor furnished S28 piling as shown on Plate 2. They will extend from elevation 80 up to elevation 130 which is about the flood of record for this site. Pervious backfill behind the cells will be at elevation 120 and be grassed for erosion protection. The slopes at the ends of the fill and cells will be protected with 24 inches of riprap to prevent flanking of the structure.

COSTS

16. The following table presents a summary of estimated costs for the stabilization of the river bank adjacent to the Mound State Park:

Estimated Costs

Item	Quantity	Unit	Unit Cost	Total Cost
Construction Costs				
Riprap Area				
1. Earthwork (Bank Grading)	21,000	CY	3.50	$ 73,500
2. Filter Cloth	29,500	SY	4.00	118,000
3. Riprap	18,500	CY	44.00	814,000
4. Bedding Material	6,420	CY	10.00	64,200
5. Clearing	10	AC	1000.00	10,000
6. Topsoil and Grassing	2	AC	1600.00	3,200
Subtotal				$1,082,900
Sheet Pile Cell Area				
1. Furnish Piling (S28)	1,652	Ton	775.00	$1,280,300
2. Driving Piling	1,652	Ton	200.00	330,400
3. Filling Cells	44,620	CY	6.00	267,720
4. Cell Drains	172	EA	5.00	860
5. Filter Cloth	3,000	SY	4.00	12,000
6. Riprap	3,600	CY	44.00	158,400
7. Pervious Backfill	16,200	CY	5.00	81,000
8. Bedding Material	200	CY	10.00	2,000
9. Topsoil and Grassing	1	AC	1600.00	1,600
Subtotal				$2,134,280
Total Construction Costs				$3,217,180

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Contingencies @ 15%	$ 482,577
E&D @ 8%	257,375
S&A @ 5%	160,859
TOTAL COST	$4,117,991

CONCLUSION

17. It is concluded that the river bank at Mound State Park can be effectively stabilized for an estimated cost of about $4,118,000.

for Austin DYKES Soils Engineer SAMEN-FS	Wilson WILSON Structural Engineer SAMEN-DN	WHITTINGTON Hydraulic Engineer SAMEN-YD

STATEMENT OF THE HONORABLE RICHARD SHELBY BEFORE THE SUBCOMMITTEE ON WATER RESOURCES OF THE SENATE ENVIRONMENT AND PUBLIC WORKS COMMITTEE ON BEHALF OF THE PRESERVATION OF THE MOUND STATE PARK

May 17, 1983

Mr. Chairman, Senator Howell Heflin and I have introduced in our respective chambers, a bill to protect the historical and cultural heritage of Mound State Park in my congressional district. The bill authorizes the Secretary of the Army to correct slope failure and erosion problems which have developed along the banks of the Warrior River where it flows past Mound State Park.

The Mound State Park is an archaeological treasure to the State of Alabama and to my Seventh Congressional District. It harbors numerous Indian burial mounds and relics which have provided tremendous insight into the customs and folklore of the American Indian.

The park's history has been recorded back to 1860, where some pipes were found on the property. In 1905 and 1906, an archaeological explorer, Clarence B. Moore, spent two months exploring in the area. His studies were published in the Journal of the Academy of Natural Sciences in Philadelphia.

During the 1930's two federal agencies, the Civilian Conservation Corp and the National Park Service, conducted extensive excavations at Moundville. Since 1938 this site has been a state monument operated by the Alabama Museum of Natural History, which is now an adjunct of the University of Alabama in my hometown of Tuscaloosa.

State Geologist Walter B. Jones displayed the attitude of concerned citizens by mortgaging his home twice during the preserve's early years in order to purchase and protect these parcels of land.

Between 1929 and 1951, Jones' carefully devised master plan resulted in the creation of a museum, conference center, picnic pavilion, a collection facility, nature trails and seven other attractive park structures. Since that time, a full hookup campground and a reconstructed village depicting Indian life ways have been added. Documentary materials from this period attendance estimates well in excess of 100,000 visitors per year.

This important park is now being threatened by the erosion of the banks of the Warrior River which runs adjacent to the Indian mounds. The deterioration of this property must be stopped to insure the safekeeping of this historic landmark.

A Corps of Engineers on-site inspection in 1980 revealed that 2,400 feet of river bank require protection to prevent a loss of the park's cultural resources. The erosion of shoreline in the area of the park has already caused some loss, and this loss is anticipated to increase in magnitude as the erosion approaches the Indian mounds. It is for these reasons that Senator Heflin and I are introducing legislation to insure the preservation of this invaluable historical resource.

In his work titled Moundville: An Historical Document, Dr. Carl E. Guthe, Director of the New York State Museum made an extremely important observation which I feel is highly valuable in considering this legislation. Dr. Guthe notes that:

> "In the minds of some, American Indian archaeology seems far removed from the problems of the present day. The student of this subject, forced through lack of written documents to work with archaeological materials and records, seeks to contribute to our knowledge of human experience through an understanding of the growth of human societies which existed in the New World prior to the coming of the Europeans. The results of his studies are a part of the great fund of knowledge which is now being used and will continue to be used by social scientists in their struggle to understand and interpret our current social problems. Therefore, the story of Moundville is far from being an isolated Indian episode. It is a small but significant element of the complex pattern of human experience out of which the society in which we live today has grown.
>
> The solution of the social problems which face us today is the responsibility of everyone of us. All of us can contribute, each according to his ability, to the solution of these problems. Social scientists working alone cannot attain their objectives. They must be helped. They need the constructive criticism, the encouragement and the support of all those with whom they come in contact. Some of us can aid in increasing educational and research opportunities; others can assist in administrative and political ways. Some can help by influncing public opinion; and still others can contribute funds so necessary for progress in the work. Of one thing I am sure. Everyone who aids in furthering any small part of the work required in the solution of the critical social problems confronting us today may do so with the assurance that he is rendering a public service which will pay worthwhile social dividends both now and in future generations."

Mr. Chairman the protection of this most significant early native American cultural center is valuable to present and future anthropological studies of indigenous populations as well as the continuation of one of the most important public recreation facilities in the area.

It would be a tragedy to sit idle while a landmark of such historical value and significance is threatened by erosion from the Warrior River. This bill that Senator Heflin and I are introducing would initiate the necessary steps to insure that this historical site is preserved for generations to come.

Thank you.

BANK OF MOUNDVILLE
Member FDIC
MOUNDVILLE, ALA.
35474

May 13, 1983

Mr. Chairman, my name is Victor P. Poole, my residence is Moundville, Alabama, and I am Chairman of the Board of the Bank of Moundville. I have lived in Moundville for most of my adult life.

Mound Park is located in Moundville and is a prehistoric archaeological site which, in layman's language, is reported to be the finest archaeological site east of the Mississippi River.

Mound Park is bounded on the Northwest by the Black Warrior River, a navigable stream running from Birmingham to Mobile, Alabama.

The erosion problem along the bank of the river is an old problem complicated by the river traffic and flood problems.

While this is an old problem, the increasing need for some flood control measures is self evident. The erosion now endangers the recreational center and picnic areas built in the 30's by private and government funds.

The loss of buried artifacts along this riverbank is tremendous and endangers valuable resources used by archaeologists to study our past.

Mr. Chairman, this erosion problem has become tremendous and with each passing day that this problem goes uncorrected, we lose a part of our past.

I trust that you will give prompt attention to this very important matter.

Thank you.

Victor P Poole

Because Alabama is on the eastern border of the archeological division known as the Lower Mississippi Area, its archeology has certain culture characteristics also found in the surrounding States. One of the most important sites within its borders, that of Moundville, shows almost no contact with other cultures. This great mound group, one of the best-preserved in the country, is on the south bank of the Black Warrior River in Hale and Tuscaloosa counties. The site includes 34 square and oval platform mounds varying in height from 3 to 58 feet. These are arranged in a rough square on a plain back from the bluffs; graded ways lead from the level ground to the mound tops, where the ceremonial houses and chief's lodges were built. Some of the mounds contained graves, but the majority of the burials were in the level land of the townsite. That the builders of the mounds believed in life after death is indicated by the great number of artifacts and pottery buried with the dead, and the fact that the vessels apparently contained food and drink for use in the after life. Definite evidences of cremation have also been found. Absence of European trade goods in Moundville burials is evidence that the occupation of the site was entirely within the prehistoric period.

The people of Moundville carried pottery making, copper working, and stone carving to a high level. Pottery was decorated with incised patterns and sometimes modeled into graceful bird and animal forms. Two stone effigy vessels from this site are considered the finest yet found in the entire mound area. An exquisite effigy bowl of diorite, in the form of a wood duck, is one of the best examples of ancient art.

Designs most frequently used by the Moundville people include the sun pattern, the swastika, the human hand, eye, skull, and arm bones, the horned serpent, eagle, heron, and ivory-billed woodpecker. Designs of birds and reptiles in various stages of conventionalization predominate. The rattlesnake is often horned and plumed, possibly as a result of Mexican influence. Another pattern that may have had a Mexican origin is an arrangement of a circle elongated into points on opposite sides, with an oval and often crosshatched centerpiece. This circle, perhaps a sun or cosmic eye symbol, is also found in other parts of the Lower Mississippi Area. At Moundville it is found incised on potteryware and on shell and stone disks, and embossed on copper ceremonial objects. Some of the eagle designs bear a close resemblance to eagles cut in sheet copper by the advanced Hopewell Mound Builders of Ohio. The use of symbolic figures by the Mound Builders was a form of picture writing, since religious or ethical ideas were identified with serpent, bird, and other designs. Symbolic figures used by the ancient Alabama Mound Builders differed from those of the Maya only in their simplicity.

In common with other mound-building peoples of the Mississippi Valley and its tributaries, the Moundville people used copper breastplates and ear plugs and ornaments of mica. Among other unusual ornaments and implements taken from the Moundville site are shell drinking cups, shell gorgets, shell pins, copper fishhooks, stone and copper axes, bone awls, flint points, stone pipes, earthenware ornaments, and a human head carved in amethyst.

The Moundville site has been converted into a State park, known as Moundville State Monument, and a museum here houses many of the artifacts found in the area.

TAKEN FROM ALABAMA: A GUIDE TO THE DEEP SOUTH. COMPILED BY WORKERS OF THE WRITERS' PROGRAM OF THE WORK PROJECTS ADMINISTRATION IN THE STATE OF ALABAMA. (PP. 30-1)

THE UNIVERSITY OF ALABAMA

Office of the President

June 24, 1983

The Honorable William L. Dickinson
U.S. Representative
2406 Rayburn House Office Building
Washington, D.C. 20515

Dear Congressman Dickinson:

In the late 1970's, three of the country's most prominent archaeologists visited Mound State Monument in Moundville, Alabama, on behalf of the Tennessee Valley Authority. After completing their evaluation of this 317-acre prehistoric Indian site, they wrote that "members of this Board, collectively, have visited or participated in research at most of the major archaeological sites north of Mexico, and it is our opinion that Moundville is the single most exciting North American archaeological site we have seen east of the Pueblos of New Mexico and Arizona." The great value of the Moundville site, they continued, "is its essentially undisturbed condition. No highway, housing project, or other development has encroached upon it. This, together with its impressive size as a major ceremonial and (presumably) urban center of a highly-developed prehistoric Indian Culture, make it an outstandingly spectacular prehistoric monument."

Since the early years of this century, a coalition of dedicated private citizens, political leaders, and educators has struggled to preserve this unique historical resource--now a National Historic Landmark--for the people of the State and the Nation. Despite the commitment of individuals like State Geologist Walter B. Jones, who mortgaged his house twice to secure the land, and the significant contributions of the Works Progress Administration, the Civilian Conservation Corps, the Boy Scouts, the Alabama Museum of Natural History, The University of Alabama, the Alabama Department of Education, and scores of professional archaeologists, the preservation of this unique site is today seriously threatened by increasing erosion caused by the Black Warrior River which forms its northern border. Not only are irreplaceable Indian skeletal remains and artifacts being destroyed, but three of the monument's public structures (erected by the W.P.A. and the C.C.C.) also now face the real danger of falling into the river. Over 21,000 square feet of property have been destroyed in the last few years, and the rate of destruction is increasing.

Senator Howell Heflin and Representative Richard Shelby of Alabama have recently sponsored legislation which, if approved, would provide the needed Federal assistance to stablize the Black Warrior River bluff and protect Mound State Monument from further deterioration. The University has been

ROSE ADMINISTRATION BUILDING 205/348-5100 POST OFFICE BOX B UNIVERSITY, ALABAMA 35486

seeking such assistance since 1977 and strongly supports this current initiative. We believe, as Senator Heflin and Representative Shelby have argued, that Mound State Monument is an historical site of unique national and international importance and that it must be preserved and protected if at all possible. Your assistance and support of this legislation will be greatly appreciated not only by the faculty and students of The University of Alabama, but also by future generations of Alabamians and other Americans who respect and cherish the cultural resources of this nation. Thank you for your help.

Sincerely,

Joab Thomas

Joab L. Thomas
President

JLT/cp

cc: Senator Howell T. Heflin ✓
Representative Richard C. Shelby

II

98TH CONGRESS
1ST SESSION

S. 850

To authorize the Secretary of the Army to correct certain slope failures and erosion problems along the banks of the Coosa River.

IN THE SENATE OF THE UNITED STATES

MARCH 18 (legislative day, MARCH 14), 1983

Mr. HEFLIN introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works

---

A BILL

To authorize the Secretary of the Army to correct certain slope failures and erosion problems along the banks of the Coosa River.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of the Army, acting through the Chief of Engineers, shall take such action as may be necessary to correct slope failures and erosion problems along the banks of the Coosa River in order to protect the Fort Toulouse National Historic Landmark and Taskigi Indian Mound in the county of Elmore, Alabama.

II

98TH CONGRESS
1ST SESSION

S. 878

To authorize and direct the Secretary of the Army to correct certain erosion problems along the banks of the Warrior River near Moundville, Alabama.

IN THE SENATE OF THE UNITED STATES

MARCH 22 (legislative day, MARCH 21), 1983

Mr. HEFLIN introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works

---

A BILL

To authorize and direct the Secretary of the Army to correct certain erosion problems along the banks of the Warrior River near Moundville, Alabama.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of the Army, acting through the Chief of Engineers, is authorized and directed to take, at an estimated cost of $4,117,991, such action, substantially in accordance with the study directed by the District Engineer and dated July 20, 1981, as may be necessary to correct erosion problems along the banks of the Warrior River in order to protect Mound State Park, near Moundville, Alabama.

SEC. 2. There are authorized to be appropriated such sums as may be necessary to carry out the provisions of this Act.

State of Florida
DEPARTMENT OF NATURAL RESOURCES

DR. ELTON J. GISSENDANNER
Executive Director
Marjory Stoneman Douglas Building
3900 Commonwealth Boulevard, Tallahassee, Florida 32303

BOB GRAHAM
Governor
GEORGE FIRESTONE
Secretary of State
JIM SMITH
Attorney General
GERALD A. LEWIS
Comptroller
BILL GUNTER
Treasurer
DOYLE CONNER
Commissioner of Agriculture
RALPH D. TURLINGTON
Commissioner of Education

May 13, 1983

Honorable James Abdnor
Chairman
Subcommittee of Water Resources
Senate Committee on Environmental
and Public Works
623 Dirkson Building
Washington, D.C. 20510

ATTENTION: Tom Skirbunt

Dear Congressman Abdnor:

I would like to take this opportunity to express the Florida Department of Natural Resources' support of the proposed legislation (S-1073-APC Bill) to raise the funding level for aquatic plant control programs nationwide.

As you know, the funding for the APC program is limited to $5 million annually nationwide, and this year for the first time the full $5 million was budgeted. In the past, Florida has received a majority of the funds budgeted, but recently other states have been entering this program. Some of these states are Texas, South Carolina, Oregon, Louisiana, and California. Also, Puerto Rico is implementing an APC program. Full implementation of these state's programs will result in a net decrease in the funds available for Florida under the $5 million funding limitation.

Florida's water levels are returning to normal and the aquatic plants are responding with rapid growth, which has presented problems this fiscal year. The State of Florida was allocated approximately $2 million for the APC program for FY 1983, but the allocation is not sufficient to handle the extent of the problems. An additional $783,000 of federal funds has been requested by the participants in the program for the remainder of this fiscal year. Without these additional funds, water hyacinth and hydrilla in many of Florida's waters will not be controlled under a maintenance program, which may pose environmental, safety, and economic problems. Furthermore, continuation of insufficient funding levels or future reductions caused by other states participating in the APC program will drastically impact Florida's ability to cope with these inevitable problems.

Honorable James Abdnor
May 13, 1983
Page 2

This proposed legislation could provide essential revenue to protect and manage Florida's water resources for the purpose of recreation, navigation, and flood prevention. Therefore, your strong support of this bill would be very much appreciated.

Thank you.

Sincerely,

Elton J. Gissendanner
Executive Director

EJG/jld
cc: Honorable Lawton Chiles

II

98TH CONGRESS
1ST SESSION

S. 1073

To amend section 104 of the River and Harbor Act of 1958, Public Law 85-500 as amended, to increase the annual funding authority for the aquatic plant control program.

IN THE SENATE OF THE UNITED STATES

APRIL 18, 1983

Mr. CHILES (for himself and Mr. THURMOND) introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works

---

A BILL

To amend section 104 of the River and Harbor Act of 1958, Public Law 85-500 as amended, to increase the annual funding authority for the aquatic plant control program.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That section 104(b) of the River and Harbor Act of 1958, Public Law 85-500, as amended by section 302 of the River and Harbor Act of 1965, Public Law 89-298, is further amended by striking out "$5,000,000" and inserting in lieu thereof "$10,000,000".

II

98TH CONGRESS
1ST SESSION

S. 812

To authorize the construction of a project for flood control in the vicinity of Albuquerque, New Mexico, and for other purposes.

IN THE SENATE OF THE UNITED STATES

MARCH 15 (legislative day, MARCH 14), 1983

Mr. DOMENICI introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works

---

A BILL

To authorize the construction of a project for flood control in the vicinity of Albuquerque, New Mexico, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of the Army, acting through the Chief of Engineers, is authorized to construct a project for flood control in the vicinity of Albuquerque, New Mexico, in conformity with the report of the Chief of Engineers entitled "Middle Rio Grande, Bernalillo to Belen, New Mexico", dated June 23, 1981, at an estimated Federal cost of $39,200,000: *Provided,* That the Chief of Engineers is authorized to increase flood protection through the dredging of the bed of the Rio

Grande in the vicinity of Albuquerque, New Mexico, to an elevation lower than existed on the date of enactment of this Act: *Provided further,* That no non-Federal interest shall be required to participate in the financing of the project, other than to provide the necessary lands, easements, and rights-of-way, unless, prior to the enactment of this Act, a standard for sharing costs on local flood protection projects has been established by law, in which case the non-Federal share shall be that established by such enactment.

SEC. 2. The project for Santa Rosa Lake, Pecos River, New Mexico, authorized by section 203 of the Flood Control Act of 1954 (68 Stat. 1280), is hereby modified to authorize the expenditure of not to exceed $250,000 for the recovery of cultural resource data, in addition to any amounts authorized for this purpose pursuant to the Reservoir Salvage Act of 1960, as amended (88 Stat. 174).

SEC. 3. The Secretary of the Army, acting through the Chief of Engineers, is prohibited from closing, downgrading, or decreasing the staff, by more than 5 per centum, of any office under the direction of a district engineer, unless such office, as of the date of enactment of this Act, is located within five hundred miles of another office of the Corps of Engineers of the same rank.

SEC. 4. The Secretary of the Army, acting through the Chief of Engineers, shall promptly transfer to the responsibility of the district engineer in Albuquerque, New Mexico, those portions of the State of New Mexico that as of the date of enactment of this Act, were under the responsibility of the district engineers in Sacramento, California, and Los Angeles, California.

II

98TH CONGRESS
1ST SESSION

S. 987

To authorize the imposition of entrance, admission, or additional user fees at certain water resources development areas administered by the Department of the Army.

IN THE SENATE OF THE UNITED STATES

APRIL 6 (legislative day, APRIL 5), 1983

Mr. STAFFORD (by request) introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works

---

A BILL

To authorize the imposition of entrance, admission, or additional user fees at certain water resources development areas administered by the Department of the Army.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That, section 4 of the Land and Water Conservation Fund Act of 1965, as amended (78 Stat. 897; 16 U.S.C. 4601–6a), is further amended by:

(a) inserting the words ", water resource development areas administered by the Department of the Army which are used in whole or in part for recreation purposes," after the words "the Department of the Interior" in the first sentence of subsection (a); and

(b) by deleting the next to the last sentence of subsection (b).

SEC. 2. Section 210 of the Flood Control Act of 1968 (82 Stat. 746; 16 U.S.C. 460d–3) is repealed.

II

98TH CONGRESS
1ST SESSION

S. 1075

To authorize the United States Army Corps of Engineers to undertake certain modifications at Abiquiu Dam in New Mexico.

IN THE SENATE OF THE UNITED STATES

APRIL 18, 1983

Mr. DOMENICI (for himslf and Mr. BINGAMAN) introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works

---

A BILL

To authorize the United States Army Corps of Engineers to undertake certain modifications at Abiquiu Dam in New Mexico.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of the Army, acting through the Chief of Engineers, is authorized to construct, at Federal expense, a set of emergency gates in the conduit of the Abiquiu Dam, New Mexico, to increase safety and enhance flood and sediment control: *Provided,* That such feature, which was eliminated during original construction due to cost constraints, shall be considered as completing the original design concept for the project.

SEC. 2. For purposes of this Act, the sum of $2,500,000 is authorized to be appropriated to the Secretary.

II

98TH CONGRESS
1ST SESSION

S. 1157

To deauthorize the William L. Springer Lake portion of the flood control project for the Illinois River and tributaries, Illinois, Wisconsin, and Indiana, and for other purposes.

IN THE SENATE OF THE UNITED STATES

APRIL 27 (legislative day, APRIL 26), 1983

Mr. PERCY (for himself and Mr. DIXON) introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works

---

A BILL

To deauthorize the William L. Springer Lake portion of the flood control project for the Illinois River and tributaries, Illinois, Wisconsin, and Indiana, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the portion of the flood control project for the Illinois River and tributaries, Illinois, Wisconsin, and Indiana, authorized by section 203 of the Flood Control Act of 1962 (76 Stat. 1189) which is to be located on the Sangamon River, Illinois, about one mile upstream from Decatur, Illinois, and which is known as the William L. Springer Lake project is not authorized after the date of enactment of this Act.

SEC. 2. Notwithstanding section 203 of the Federal Property and Administrative Services Act of 1949 and any other provision of law, before any lands acquired by the United States for the William L. Springer Lake project referred to in the first section of this Act are sold or otherwise disposed of or used for any purpose other than to carry out such project, such lands shall first be made available for purchase by the city of Decatur, Illinois, at the price at which such lands were acquired by the United States.

STATEMENT ON WATER RESOURCES DEVELOPMENT BY COMMISSIONER HENRY G. WILLIAMS, NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION, TO UNITED STATES SENATE, THE COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

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JULY 1983

Mr. Chairman and members of the Committee, I am Henry G. Williams, Commissioner of the New York State Department of Environmental Conservation. I am submitting testimony in support of national policies that will provide a more flexible and efficient Federal system to assist New York and the other states to develop and manage our critical water resources. I am also submitting testimony on authorization of specific projects and other legislative actions that are necessary to meet New York water needs.

Summary of Recommendations

New York State has invested heavily in its water infrastructure, whether they be water supply systems, flood control facilities, sewerage systems, canals or hydroelectric generating facilities. The infrastructure is the foundation of our economy. It allows people to be productive.

However, these capital assets have been allowed to become obsolete, deteriorated and unreliable. Repair has a multi-billion dollar price tag and the need for it is no longer debated. It is obvious, made so by the uncompetitive nature of our economy. Thus, the financing of the rehabilitation and improvement of the nation's infrastructure has become a major issue facing the Congress.

It is time that the roles of each level of government in this effort are specified. Uncertainty over this issue will prolong the enaction by us all. Thus, it demands immediate attention.

We have developed a program outline which defines these roles. The states must be more responsible for the development, operation and maintenance of their capital plant. Yet if the states are going to assume that role, we must be assured of equitable and consistent ground rules. Traditionally, the Congress has felt that public works investments were in the national interest. However, in New York State where water supply is our most pressing need, we pay 100 percent of project costs as they are ineligible single-purpose projects. Yet according to the Congressional Budget Office, the national average for the non-federal share of federal water supply projects is 64 percent. This puts New York State at a distinct disadvantage.

Unfortunately, the infrastructure deterioration is such, and the expense so vast that some federal assistance is needed. Clearly, needs and their financing vary from state to state and project to project. Flexibility must also be a feature of any solution. Yet, the Federal/non-Federal cost-sharing policies must also be consistent to achieve equity and to preserve competition.

In our view, the federal role becomes one of collecting and pooling of funds as well as establishing guidelines for expenditure. The state's role is that of a banker selecting projects to be funded. What follows are our recommendations on the definition of these roles.

In summary, we recommend Congressional action to accomplish the following:

Cost Sharing

- establish, in law, 75 percent Federal and 25 percent non-Federal cost sharing for flood control, beach erosion control and hurricane protection projects.
- provide a Federal subsidy for single-purpose public water supply projects.
- continue 100 percent Federal funding for reconnaissance and feasibility studies for water projects.
- provide 75 percent Federal and 25 percent non-Federal cost-sharing on operation and maintenance of existing navigation projects.
- provide 50 percent Federal and 50 percent non-Federal cost-sharing for developing and operation and maintenance of new navigation projects.
- provide, by law, consistent and flexible cost-sharing policies.

Water Supply

- provide for Federal assistance in single-purpose public water supply system rehabilitation projects through changes in the 1958 Water Supply Act.
- authorize the Hudson River Water Supply Project, including additional Phase I studies and the New York City Water Tunnel No. 3.

Flood Control and Beach Erosion Control

- authorize four (4) flood control and beach erosion control projects for New York State.
- provide authority for Federal participation in major rehabilitation of flood control facilities.
- authorize remedial work to protect the Federally-constructed levee at Vestal, New York.

Navigation

- authorize Gowanus Creek channel improvement project and improvement project for Kill Van Kull and Newark Bay Channels, New York and New Jersey.

Amendments to Existing Laws and Regulations

- direct the Corps of Engineers to rescind Regulation ER 1165-2-21 which establishes criteria for the Federal interest in flood protection works on streams.
- increase the funding authorization of Corps of Engineers technical assistance to states, by amending Section 22, P.L. 93-251.

- enact basic concepts of the National Water Resources Policy and Development Act of 1981, S.621, and parallel House bill, H.R. 5840.
- enact concepts of S.1095 and H.R. 3432 water resources planning legislation.
- enact the basic concepts of S.532, the Public Investment Incentive Act of 1983.
- enact the basic concepts of S.671, the National Dam Safety Program.
- provide an equitable system of commercial traffic user fees on all elements of the Federally supported water transportation system.
- prevent the Corps of Engineers from proceeding with winter navigation in the St. Lawrence River under their general operation and maintenance authority.

STATEMENT ON WATER RESOURCES DEVELOPMENT BY COMMISSIONER HENRY G. WILLIAMS, NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION, TO UNITED STATES SENATE, THE COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

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JULY 1983

The State of New York traditionally has managed its water resources to support economic development and the social well-being of its citizens. The bulk of construction and management activities have been accomplished by the State and local governments without Federal assistance. For example, since 1965, we have invested more than $7 billion in the construction of municipal sewage treatment plants. We have many billions of dollars invested in our water and sewer infrastructure.

Now we are faced with additional water and sewage treatment needs and with the extremely expensive and difficult task of rebuilding our water supply systems. We also need to protect our citizens more adequately from the dangers and damages of floods and beach erosion. We cannot meet these needs alone, or with the limited Federal assistance we are receiving under present policies for allocating Federal water development funds.

New York, along with the other states in the Northeast and Midwest, needs a commitment of Federal funds comparable to the Federal investment in massive and costly water projects in the South and West. In Fiscal Year 1983, New York received an average of $2.61 per capita of water development funds compared with $19.59 per capita for states in the South and West. The Northeast and Midwest together received an average of $6.28 per capita.

Congress must create a balanced, genuinely national policy to develop and manage water resources in every part of the Country on an equitable basis. Our cost-sharing recommendations will help meet this need. Also, the establishment of infrastructure banks as proposed in S.532 would help meet these needs.

We also support legislation which will reallocate water development funding, implement a consistent plan for cost-sharing and grant more authority to the states for water resources planning and for establishing water project priorities. The 1981 water resources policy and development proposals of Senators Dominici and Moynihan (S.621) and Congressman Edgar (H.R. 5840) embody concepts which can achieve these goals.

Cost Sharing

Fundamental to the proper management and use of the nation's water resources are national policies for joint Federal and non-Federal financing which are equitable and promote the most effective water projects and programs. We believe that it is time for the Congress to reform existing policy to assure consistent cost-sharing, to correct certain important deficiencies, and to encourage efficient water resources management nationwide.

We are concerned with the continued uncertainty resulting from proposed, unilateral changes in Federal policy on Federal involvement in water resource projects. New York supports comprehensive reform of Federal water project financing, including the adoption of cost-sharing and cost recovery policies which simplify current arrangements However, we believe that such fundamental changes should be adopted only after full consideration and direction from the Congress and should be applied on a uniform basis by all Federal agencies. We oppose their adoption and implementation on an ad hoc basis by individual Federal agencies.

Consequently, we advocate the continued use of the current cost-sharing arrangements for planning, construction, and operation and maintenance of projects which were established under Federal law, until appropriate uniform changes can be agreed upon and adopted by the Congress. Also, we support the existing system which spreads repayment of the non-Federal cost share of a project over the life of such project or up to 50 years. We are opposed to up-front funding or the repayment of the entire non-Federal share during the construction of the project.

Meaningful reform of Federal water resource policies must also address the regional inequities in the distribution of Federal water resource funds. Current Federal policies continue to favor the construction of large-scale, multi-purpose projects which do not address the particular needs of New York and the Northeast.

The water resource problems of New York are not the same as those of the Far West. Federal water policy must recognize this fundamental fact. Changes are necessary if we are to address the legitimate and pressing needs of all regions of our country. Safe and reliable water supplies for public use are as important a national interest as irrigation, recreation, navigation, and flood control, all of which are subsidized, sometimes substantially, by the Federal government.

Equitable cost-sharing requires consideration of four aspects of project financing:

1. Non-Federal contributions
2. Study costs
3. Consistency among agencies and methods
4. Flexibility

1. Non-Federal Contributions

New York is particularly concerned about equitable cost-sharing for flood control, beach erosion control and hurricane protection projects, and for water supply projects. We urge that the Congress incorporate into law appropriate cost-sharing arrangements for such projects to meet the needs of State and local sponsors while achieving Federal objectives. We recommend the following cost-sharing:

a. Flood control, beach erosion and hurricane protection should be subject to a cost-sharing formula of 75 percent Federal and 25 percent non-Federal for both structural and non-structural solutions for all Federal agencies. The total cost to be shared includes preconstruction planning, construction first costs, lands, easements, and rights-of-way, and all relocations necessary for project construction. Credit for in-kind services, either Federal or non-Federal, should be applied to the respective shares. We could support cost-sharing of post-authorization project design if the Federal procedures are greatly streamlines and full credit is given for in-kind services.

New York State is strongly opposed to requiring a certain percentage of project cost to be borne by non-Federal sponsors as a minimum but still requiring that all costs for lands be non-Federal. We also strongly oppose the requirement contained in S.1031 that non-Federal sponsors must contribute 10 percent of project costs in cash during the construction period. Both of these requirements are inconsistent with the concepts of equitability and consistency between projects and Federal water resources agencies which New York endorses.

b. We believe it is essential that the Federal government recognizes, through its assistance programs, that water supply for people is a necessity as a life supporting system and as a catalyst for economic development. Specifically, we support the inclusion of single-purpose, public water supply projects and the rehabilitation of water supply systems for Federal financing assistance. We believe the provisions contained in the 1958 Water Supply Act provide a basis for Federal financial involvement in the form of: (1) low interest rates for loans, (2) long repayment periods, (3) delay of start of payments until use, and (4) added project eligibility. Also, innovative approaches for financing water supply rehabilitation needs through water banks and/or other capital investment incentives are needed.

There is a need for a more equitable system of cost-sharing and/or user fees on Federally-supported water transportation systems. Navigation projects should provide some reimbursement to the Federal government for the cost of construction and operation and maintenance. We would support a cost-sharing arrangement of 75 percent Federal and 25 percent non-Federal on operation and maintenance of existing projects and 50 percent Federal, 50 percent non-Federal for development, operation and maintenance of new projects. Non-Federal interests should be allowed to recover their costs for improvements through the use of user fees on a port-by-port basis and a waterway segment-by-segment basis.

2. Study Costs

New York State is particularly concerned about proposals that non-Federal interests share in the cost of studies. The states should not have to underwrite Federal studies undertaken to determine the feasibility of Federal involvements.

We support the continuation of a 100 percent Federal funding of reconnaissance and feasibility studies. The Federal government should fund the studies which it conducts to determine the feasibility of Federal involvement in water resource projects. However, the more detailed post-authorization studies should be added to project costs when construction begins and cost-shared in the same way as construction costs.

3. Consistency

Cost-sharing arrangements should be consistent among agencies and among alternative methods for achieving the same result. They are not so today.

Project beneficiaries can "shop around" from one agency to another, looking for the best water project deal. Congress should establish, by law, the same cost-sharing levels for the Corps of Engineers, the Bureau of Reclamation and the Soil Conservation Service for projects with like purposes, to eliminate competitive advantages based solely on Federal subsidies which differ from region to region and from agency to agency.

Recent experience in the construction of flood protection projects in New York has shown substantial inequities for alternative solutions under traditional cost-sharing requirements. Cost shares for different approaches to satisfy the same purpose should be the same. For instance, a non-structural flood damage abatement solution, such as relocation, should be jointly financed at the same level as a structural solution.

Cost-sharing need not be consistent from purpose to purpose. The Country's economic and environmental goals may best be met by having variable cost-sharing percentages for different project purposes. The requirement that if beneficiaries can be identified they should pay, should be applied not only to water supply but also to irrigation and recreation projects, including their operation and maintenance.

4. Flexibility

We recommend that Federal water resource programs allow the states discretionary authority to utilize all kinds of measures considered most appropriate to achieve a desired result. The most cost-effective solution to a particular problem can very depending upon conditions including local and regional economics. For example, water supply needs may be equally well satisfied by rehabilitating obsolescent and deteriorated water distribution systems or by the construction of reservoirs. Only the latter solution is funded under existing authority.

Water Supply Infrastructure

Water supply infrastructure rehabilitation is one of the most urgent water resource problems in New York State and in most urban areas of the Country. Supplying adequate water to our cities will require equal emphasis on rehabilitation and replacements and on development of new water supply sources and systems. A major State/Federal/local cooperative effort is required to restore deteriorating systems.

Although the exact magnitude of water system infrastructure problems is not known, critical community needs are rapidly emerging as a result of recent studies at the State and national levels. In New York, we estimate our statewide water system rehabilitation needs at between $6 and $9 billion. If projected water supply needs are included, a capital construction cost of about $20 billion is likely. The interest expense adds to the dilemma. Clearly, this kind of expenditure is beyond the financial capability of State and local governments. For example, the capital expenditure necessary to undertake a recommended rehabilitation program in Buffalo, based on a 1981 Corps of Engineers study, ranges from $171 million to $313 million. The financial impact on the City, because of borrowing costs which were estimated at a low 8.6 percent, still would leave Buffalo with a cost between $191 million and $429 million which they will be unable to meet. If historical rates of inflation are considered, the shortfall of funding for Buffalo could reach $1.6 billion.

Water system rehabilitation needs in New York City will range to $2.8 billion over the next 10 years without the Third New York City Water Tunnel. The tunnel cost is estimated at $3 to $11 billion depending on how many of the stages are built and when Rochester and Niagara Falls each estimate a $200 million need. Smaller cities like Albany and Binghamton have at least $45 million needs.

The problem is not limited to cities. Rural water systems in Cortland County were recently investigated by the Corps of Engineers as well. The rehabilitation need is estimated at $5.2 million for the 7 smaller systems investigated. In New York State, there are nearly 1,800 such water supply systems. The average cost per connection ranges from $170 to $710 annually with a 20-year, 10 percent loan to $380 to $1,500 annually over 5 years at 10 percent. None of these communities has plans or equipment for an emergency. In their case studies, the Corps recommended State and Federal assistance as the capital improvement costs are beyond the financial ability of each community.

In the last few years, New York State has conducted fourteen studies of individual water supply systems and interviewed officials in nearly 50 other communities. Some of the characteristics of the deteriorating systems based on the studies and interviews are as follows:

- Unaccounted for water, that is, non-revenue producing water, generally ranges from 35-55 percent. In rural areas, the figure is higher.

- Many distribution systems are inadequate because of obsolescent materials, poor design, external corrosion, tuberculation and inoperative valves. These conditions result in frequent main breaks, low pipe carrying capacities and low fire hydrant pressures.

- As a result of the poor condition of distribution and transmission facilities, leakage is greater, causing higher treatment and pumping costs, increased water losses and inadequate fire flows. In many localities, there is a need to improve rate structures, install new meters or replace old ones, reduce unaccounted-for water and implement more effective water conservation practices. In some cases, there are significant additional indirect costs to the water consumer for fire insurance because of inadequate pressure, higher taxes to meet added expenses to maintain and operate the water system and higher liability claims against the municipality because of damage caused by main breaks. In addition, the reputation and attractiveness of a community to industry, labor and management is damaged by the constant disruption caused by infrastructure failures.

- Plans for water supply emergencies are non-existent in most communities.

- Additional treatment plant capacity associated with meeting safe drinking water standards for toxics will add an additional burden on municipalities that will tend to defer rehabilitation projects, and add to operation and maintenance expenses.

- Almost all water systems operators understand their systems and know their priority needs but lack funds and commitment by others to undertake the necessary improvements.

- Additional supply and storage capacity is needed particularly in rural areas and in southeastern New York.

In New York, Governor Cuomo has proposed the creation of a State Water Finance Authority to assist communities in financing their water and sewer system infrastructure rehabilitation and improvement projects. The Authority would help communities principally by enabling revenue bond financing and isolating utility revenue to protect investors' capital. The Authority legislation has passed the Assembly, but not the Senate.

The nature of the Authority is such that it could operate as an infrastructure bank. S.532 which we support, would assist in capitalization of the bank.

Although this financing arrangement would put the water and sewer utilities on a self-sustaining basis with the costs equitably borne by the users, it is our belief that grants are sometimes required as an incentive for initial program acceptance. Also, some New York cities as well as rural communities are unable to pay the entire rehabilitation/improvement project cost. We recommend that the states be provided through the banking concept developed in S.532 the discretionary authority to grant communities up to 25 percent of the project cost. Guidelines similar to those used by FmHA could be developed by the States in cooperation with the Federal government to ensure grant consistency.

Specific Water Supply Projects and Studies

We recommend the additional Phase I studies, including the identified Federally-funded studies relating to new supply development, for the Hudson River Water Supply Project. These studies would assess existing and future demands in light of the 1980-81 drought experience, define alternative solutions within acceptable environmental limits and water quality standards, and determine the Corps of Engineers' role in the Hudson River water supply and in water system rehabilitation and improvement.

The Third City Water Tunnel is urgently needed to alleviate water supply distribution problems in the New York Metropolitan Area. Completion of the tunnel at an estimated cost of $3-$11 billion prices is needed to avert a water supply emergency and to deliver additional needed water to the Metropolitan Area.

The first stage is under construction by the City, but construction must be accelerated. Early completion of Stages 1 and 2 essential to allow for inspection and repair of the existing two tunnels built in 1917 and 1936. We recommend that the project be authorized for construction and made eligible for Federal financial assistance through changes in the 1958 Water Supply Act.

Flood Control and Beach Erosion Control Projects

Flood control and flood plain management continues to be of critical importance to New York State. Life threatening conditions exist and average annual flood damages are on the increase. We strongly urge Congressional support of the following projects which have been delayed and postponed. They would provide flood protection for many of our State's citizens as well as protect commercial and industrial enterprises now suffering severe economic losses.

Byram River, Greenwich, Connecticut and Port Chester, New York

Recurrent flooding in recent years has caused severe economic losses to residents and commercial and industrial enterprises in the Byram River Basin in Greenwich, Connecticut and Port Chester, New York.

A feasibility report, forwarded by the Chief of Engineers to the Secretary of the Army for transmission to Congress, indicates that the flood protection measures are engineeringly and environmentally feasible, and economically justified. This project is strongly supported by local interests and by the State of Connecticut. New York State recommends it authorization.

Mamaroneck and Sheldrake Rivers Basin

Major floods have occurred in the Mamaroneck and Sheldrake Basin, causing millions of dollars in damages to the Village and Town of Mamaroneck in 1955, 1972 and 1975. The Chief of Engineers has recommended improvements for flood control on the Mamaroneck and Sheldrake Rivers in the Village of Mamaroneck, but has not recommended authorization of improvements on the Sheldrake River in the Town of Mamaroneck. The reason for lack of recommendation of the latter portion of the project, which incidentally has the highest economic justification of any portion of the project, is the finding of the Board of Engineers for Rivers and Harbors that flood protection in this reach of the Sheldrake River does not meet the criteria of Regulation ER 1165-2-21. This regulation, adopted without opportunity for public comment, arbitrarily defines damage areas along a stream with a 10-year discharge of less than 800 cfs or a drainage area of less than one-half square mile, to be a storm drainage problem. Accordingly, this regulation allows no Federal interest in construction of improvements for damage reduction.

The State of New York strongly urges the Congress to authorize the Mamaroneck and Sheldrake Rivers Project as originally recommended by the District and Division Engineers.

Cazenovia Creek at West Seneca

A feasibility report on this proposed project was submitted in 1977 by the Chief of Engineers as an interim report on the Buffalo Metropolitan Area, New York Water Resources Management Study.

West Senaca has a long history of flooding problems from Cazenovia Creek, the majority of which are caused by ice jams. Damages due to ice jam flooding occur in a highly developed residential and commercial area of this suburb of Buffalo. A sudden ice jam flood in January of 1981 was responsible for one death in West Seneca. The recommended plan for protection includes both structural and non-structural measures. The key structural facility is an ice retention structure, for which New York has requested a model study during the post-authorization plans.

This project has been long delayed and is critically needed to prevent damages which occur almost annually. The State and local interests strongly recommend authorization by Congress.

Rockaway Inlet to Norton Point Beach Erosion Control Project

A recommended plan of improvement by the Corps of Engineers consists of beach restoration and construction of two terminal groins at a total cost of $3,690,000 to be shared equally by Federal and non-Federal interests. This recommended plan, modified from the original proposal by the Corps since a determination was made that Federal participation in this project should be limited to beach restoration to the historic shoreline, is not adequate for local needs.

The preferred original plan, called Plan II, was supported by local interests as it widened the beach beyond the historic shoreline and provided much needed increased recreational area. This plan would cost $11,370,000. Restriction of Federal participation to the historic shoreline reduces Federal cost-sharing in the total project of $2,770,000 or only 24 percent of project costs.

Shore erosion is only one component of coastal management. The recreational aspects of the Coney Island beaches are extremely important. These beaches are among the most heavily used in the Country, with over 10,000,000 visitations annually. It is not uncommon on a hot day to have over 400,000 visitors, which results in extreme overcrowding. The Federal standard for beach recreation allows 75 square feet per user and a turnover factor of two. Applying these criteria, even the preferred Plan II proposals provide for only 145,200 visitors per day, which is considered minimal for local needs. A further reduction by retreat to the historic shoreline would result in an even more woefully inadequate project.

Federal participation in construction of recreational facilities is normally 50 percent or greater. Federal participation in publicly-owned shore erosion projects is normally 50 percent of the project cost. It is inconsistent of the Federal government to adopt a policy which substantially reduces Federal participation below 50 percent for this shore protection and recreational project.

New York State has recently been advised by the Secretary of the Army that the report of the Chief of Engineers has been forwarded to the Congress with the recommendation for authorization, subject to a 5 percent cash contribution by the State, in addition to the normal non-Federal contribution of 50 percent of project cost.

This project has been long delayed. New York strongly urges that Plan II be authorized, consistent with past policy with Federal and non-Federal interest sharing equally in project costs, without a 5 percent surcharge.

Flood Control Project Rehabilitation

In recent years, the Department of Environmental Conservation, as the agency representing all non-Federal interests in New York in Corps of Engineers' flood control programs and as the agency responsible for operation and maintenance of completed flood protection projects, has become increasingly concerned with the need for major rehabilitation of major project facilities which pre-date Corps of Engineers' projects and were incorporated into a Federal project, and of Federally-constructed facilities which have reached or are approaching the end of useful economic life. Of particular concern are facilities such as concrete floodwalls and floodwater pumping stations. In the case of old floodwalls which are deteriorating even though properly maintained, the cost of floodwall replacement is far beyond the anticipated costs for operation and maintenance envisioned at the time State assurances were originally furnished. In the case of pumping stations, replacement parts for electrical and mechanical equipment become unavailable 40 or more years after the original installations, and pumps, motors and electrical equipment must be replaced to ensure proper project operation. Again, the cost of these replacements is beyond the operation and maintenance costs anticipated at the time assurances were provided to the Federal government.

We urge that legislation be enacted which would provide for Federal participation in the cost of major facility rehabilitation or replacement in those cases where the need for rehabilitation or replacement is not the result of inadequate maintenance. Federal participation could be based upon the cost-sharing in the original project or a new cost-sharing formula as established by the Congress.

We would welcome the opportunity to work with staff of this Committee in drafting suitable legislation.

Rehabilitation: Bank Erosion - Vestal, New York

Beginning early in 1974, we brought to the attention of the Baltimore District, Corps of Engineers, a serious bank erosion problem which threatens the integrity of a Federally-constructed levee in the Vestal portion of the Endicott-Johnson City-Vestal Flood Protection Project. After a number of years, during which the situation has grown more critical, we were advised in December 1979 by the Office of the Chief of Engineers, that the Corps had no authority to undertake remedial work without specific Congressional authorization.

We urge that Congress authorize remedial work to protect the Federally-constructed levee at Vestal, New York, in accordance with the recommendation of the Baltimore District Engineer as approved by the North Atlantic Division Engineer, dated September 25, 1975, at a cost estimate as of that date of $306,000.

Navigation Projects

Gowanus Creek Improvement Project

The present channel is 30 feet in depth. The proposed improvement will deepen the channel to 40 feet, a distance of 2,000 feet, and serve a major oil terminal and Port Authority grain elevator. The improvement will continue another 1,000 feet at a depth of 35 feet to serve a Port Authority container terminal. The improvement will continue at a 32-foot depth for 1,600 feet to a coffee warehouse. This coffee warehouse has national significance as imports are distributed nationwide from this facility.

Cost of the project is estimated at $3,015,000. Federal cost will be $1,877,000.

It is imperative that this project receive your full endorsement in order to realize the anticipated benefits to navigation and commerce. At present, the depth of the waterway is inadequate and the economic vitality of the area is in jeopardy. Several of the industries along the Gowanus Creek have expressed grave concern about their inability to safely and economically utilize the Creek as well as the Canal. Without a major improvement in the waterway, the industries will either have to constrict their operations or move elsewhere. Needless to say, either one of these alternatives would be detrimental to the economic health of the Brooklyn waterfront. Consequently, I urge you to approve the project and do everything you possibly can to ensure that this project receives the authorization necessary to move towards construction.

Kill Van Kull and Newark Bay Channels, New York and New Jersey

This project, under study by the Corps of Engineers for nearly 10 years, constitutes the deepening and selective widening of a key general cargo, containership and tanker channel in the Port of New York and New Jersey. The total cost is estimated to be $219,400,000, with $48,000,000 of the total being non-Federal. The B/C ration is 7 to 1. Its construction is critical to increased safety and reduced costs for such shipping by fostering larger and more fully laden, thus fewer, vessels on this waterway as demanded by modern transportation technology. The improvement also has special significance to the State and City of New York, since an improved Kill Van Kull will serve as a connector near Shooters Island for a similar channel study now underway to deepen the Arthur Kill approaches to the Howland Hook Marine Terminal on Staten Island.

Recommended Amendments to Existing Laws and Regulations

Chief of Engineers' Regulation ER 1165-2-21

In May of 1978, the Chief of Engineers promulgated Regulation ER 1165-2-21, which establishes criteria for the Federal interest in flood protection works on streams. This regulation established a new policy governing Corps of Engineers' flood control activities. It limits Federal participation to damage areas along a stream with a 10-year discharge of 800 cfs or more or of drainage areas of one-half square mile or more. This policy is inconsistent with many past authorizations for various flood control projects, and, in our opinion, is contrary to the intent of the Congress as expressed in laws authorizing various Federal flood control programs (see discussion of Mamaroneck and Sheldrake River Project). The regulation was adopted administratively, without an opportunity for input from affected non-Federal interests.

We strongly urge that the Chief of Engineers be instructed to rescind ER 1165-2-21. If, in fact, there is a legitimate need to establish criteria for differentiating between drainage problems which are a local responsibility and flood problems where Federal assistance may be justified, such criteria should be adopted by the Congress after a thorough study, with opportunity for input from non-Federal interests. Further, we urge that there be Congressional oversight of Corps regulations to require input from non-Federal interests before potentially controversial regulations are promulgated.

Section 214-22 Program

Currently, the only Federal funds that are available to assess water resource problems in New York State are through Section 214 of the River and Harbor Act of 1965 (P.L. 89-298)/Section 22 of the Water Resources Development Act of 1974 (P.L. 93-251). In recent years, Section 214/22 funds have been used to investigate urban water supply rehabilitation needs, flood plain management projects and hydraulic and hydrologic aspects of projects.

The Section 214 Program has worked extremely well. It provides an opportunity for the Federal, State and local governmental communities to reconcile issues together, to their mutual satisfaction and benefit. This consensus decision-making results in productive solutions to local problems of Statewide significance. Recently, under the Section 214 Program, the Corps of Engineers has investigated the critical needs of several of the State's municipal water supply systems including studies in Albany, Buffalo and New York City.

Public water supply rehabilitation investments and maintenance of water supplies in the event of drought are urgent needs that can no longer be ignored, particularly in this time of high unemployment. The Section 214 Program allows the Corps to respond to State and local water resource study priorities in a timely fashion.

In spite of its success, the Corps of Engineers has discontinued use of the Section 214 authorization and is providing technical assistance to New York under Section 22 authorization which has a funding ceiling that reduces the availability of Corps assistance. We recommend that the Congress increase the authority ceiling of $200,000 in Section 22 of P.L. 93-251 to $500,000.

National Water Resources Policy and Development Act

We support the basic concepts of the National Water Resources Policy and Development Act, S.621, and the parallel provisions of H.R. 5840 that were developed in 1981. Enactment of national legislation is particularly important at this time because critical and varied water resources problems of many regions of the nation are not being addressed under the present archaic system of project planning. The concept that water problems and needs occur uniformly across the Country and should therefore be addressed in the same fashion everywhere, is out of step with events.

Requirements for water vary by region and by purpose. Demands for irrigation, industry, navigation, power and domestic water uses are widespread. For the nation to adequately fill all its water requirements, a flexible regionalized program for allocating water project resources, such as that created by S.621, is urgently needed. We believe that costly delays in project development will be removed by placing the principal responsibility for setting project priorities where it belongs, with the states.

Existing Federal water programs are geared to provide assistance for new construction but not for rehabilitation of the nation's existing capital assets, nor for new water supply development. Provision for infrastructure rehabilitation is needed. The nation's capital assets depreciate, deteriorate and become obsolete with age. The concepts of S.621 would provide flexibility in Federal participation, so that states and localities can realistically meet their needs on a priority basis.

National Water Resources Planning Act

We support the concepts of the 1981 water resources planning legislation, S.1095 and H.R. 3432. In particular, we support a grant program to the states for management of water resources, as well as planning, with annual appropriations over a 5-year period to permit the states to plan and complement long-term management strategies. We also support the need for a Federal/State water resources coordinating mechanism with an independent Chairman and a State Advisory Group to assure consideration of regional interests.

National Harbors Improvement and Maintenance Act of 1983 (S.970)

We support an equitable system of commercial traffic user fees on all elements of the Federally-supported water transportation system. User fees should be collected and used for operations, maintenance and capital improvements on a port-by-port and segment-by-segment basis.

Our support of S.970 for deep-draft channels and harbors, is contingent on the development of shallow-draft legislation with parallel provisions as to the scope, levels and administration of cost recovery. The legislation should be written to allow New York State the option of including the navigation function of the State Barge Canal in the national shallow-draft system. The Canal is the only significant inland waterway in the nation not financed by the Federal government.

National Dam Safety Program (S.671)

We strongly support S.671 with the following exceptions:

We oppose the recommendation in Section 1 to delete the final sentence of P.L. 92-367 which states, "This Act does not apply to any such barrier which is not in excess of six feet in height, regardless of storage capacity or which has a storage capacity at maximum water storage elevation not in excess of fifteen acre-feet regardless of height." This sentence should remain with the following addition. "This Act should also include all high hazard dams without minimum restrictions for height or storage capacity."

We support all parts of Section 8 except Item (3). Item (3) indicates that every dam in the State shall be inspected at least once every two years. The implementation of S.671 in New York will involve the additional inspection of 560 low hazard dams. These low hazard dams have minimum hazard potential and should not be inspected as often as the high and moderate hazard dams. The cost for this type of program would be disproportionate to the potential benefits. We recommend that the low hazard dams be inspected once every four years.

We propose an option to Section 15 which authorizes the Corps to maintain and periodically publish updated information on the inventory of dams. The Corps of Engineers terminated their involvement in the dam inventory program in February 1982. We suggest the Corps of Engineers should be authorized to contract with the States to maintain an inventory of dams program.

An Act to Modernize Certain Corps of Engineers' Authorities (S.709)

We strongly oppose Sections 7 and 8 which deal with automatic deauthorization of projects and studies after 10 and 4 years, respectively. Deauthorization should be a direct action of the Corps with input from states and/or local sponsors. We oppose the bill unless it is amended to provide for inclusion of states and/or local sponsors in the decision process.

Public Investment Incentive Act of 1983 (S.532)

We strongly support the concept of creating State infrastructure banks capitalized by the Federal government to finance public works and infrastructure investment. The needs of states and localities vary from region to region, with abilities to pay varying from locality to locality and project to project. The states can best determine project priorities and cost-sharing arrangements.

S.532 is applicable to a broad range of physical structures and facilities. From a water perspective, we prefer an infrastructure bank limited to water supply and wastewater facilities. The Federal contribution also should be increased to at least 20 billion over ten years in view of the magnitude of returned water infrastructure needs.

We recommend that an allocation formula be specified in the bill based on population only. In addition, there should be a means for the states to provide grants from the bank as well as loans. These should be limited to no more than 25 percent for water supply facilities, under a formula similar to the one now used by the Farmers Home Administration.

Soil Conservation Service - Agricultural Benefits

In the recent past, proposals have been made for amending P.L.-566, the Small Watershed Protection Law, to require that in future projects, at least 20 percent of the benefits must accrue to agriculture. We strongly oppose such an amendment because it would make ineligible most P.L.-566 projects in New York for protection of urban areas.

State Obligations

The Flood Control Act of 1970 requires the non-Federal interest to enter into a written agreement with the Secretary of the Army to furnish the required cooperation for the project. We favor an amendment such that where the non-Federal interest is the State itself, the agreement does not obligate future legislative appropriations for such performance payment when obligating future appropriations would be inconsistent with State constitutional limitations. This amendment would eliminate the need to provide the total non-Federal share up-front for a project funded by the Federal government on a multi-year basis.

River Ice

We recommend an amendment which would direct the Corps of Engineers to undertake a research program to increase their capability to control river ice and give them a more active role in ice control and ice break-up.

Winter Navigation

New York State remains unequivocally opposed to any winter navigation/season extension on the St. Lawrence River. We urge the Congress not to appropriate any more funds for this project and to stop the Corps of Engineers from proceeding with winter navigation under their general operation and maintenance authority.

The Corps of Engineers recently transmitted its season extension report to Congress for information, but not for authorization consideration (the Corps has stated it already has the authority for winter navigation). We seriously question whether existing law gives the Corps authority for season extension because the Great Lakes-St. Lawrence System is extremely complex with intergovernmental and international concerns of significant consequence. The season extension would not be a routine operation and maintenance project, but rather could have immense impacts of the System.

With its incomplete data on environmental considerations, the report, as transmitted, is totally inadequate. A systemwide Great Lakes environmental study is needed. Independent economic and environmental analyses made to date have shown that winter navigation/season extension on the St. Lawrence is not economically nor environmentally justified. Our review of the Corps; survey report indicated that the national economic benefits have been overestimated by a factor of 10 and potential costs far outweigh the benefits.

We appreciate the opportunity to present our views on these very important aspects of the water resource programs of the state and nation.

The Honorable Henry G. Williams
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ACSM
AMERICAN CONGRESS ON SURVEYING AND MAPPING

210 Little Falls Street
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April 21, 1983

The Honorable James Abdnor, Chairman
Subcommittee on Water Resources
Senate Committee on Environment and Public Works
SD-625 Dirksen Senate Office Building
Washington, D. C. 20510

Dear Senator Abdnor:

The American Congress on Surveying and Mapping (ACSM) and its affiliate, the American Society of Photogrammetry (ASP), are professional societies comprised of more than 33,000 national and local members in the fields of surveying, mapping, photogrammetry, and remote sensing.

The professional surveying and mapping services provided by our members are of critical importance to the water resource projects under consideration by your subcommittee. Surveys and maps serve as an integral part of every phase of these projects. It is, therefore, critical to the long-term cost and safety of each project that the surveying and mapping services utilized by the Corps of Engineers and other agencies be of the highest quality and greatest value to the government.

ACSM-ASP is deeply concerned about recent legal interpretations and policy revisions by the Corps of Engineers affecting procedures for the procurement of surveying and mapping services. We urge the committee to remedy this matter by providing the Corps with clarification of its authority to use procurement procedures which assure the public of quality surveying and mapping work.

Enclosed is a written statement for inclusion in the subcommittee's hearing record on water resource project authorizations. We appreciate this opportunity to present our views and look forward to working with the committee on this important matter.

Sincerely,

Paul B. Lapham /jmp
Paul B. Lapham
Chairman, Joint Committee on
Legislative Affairs

Enclosures
P.S. If you or the subcommittee staff has any questions or desires further information, please do not hesitate to contact ACSM-ASP through our Government Affairs Director, Mr. John M. Palatiello, 210 Little Falls Street, Falls Church, Virginia 22046, telephone 241-2446.

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STATEMENT OF THE
AMERICAN CONGRESS ON SURVEYING AND MAPPING
AND THE
AMERICAN SOCIETY OF PHOTOGRAMMETRY

Mr. Chairman, members of the Subcommittee. The American Congress on Surveying and Mapping (ACSM) and its affiliate, the American Society of Photogrammetry (ASP), are pleased to have this opportunity to present our views on the role of surveying and mapping services in water resource projects.

ACSM and ASP are professional societies comprised of more than 33,000 members in our national, state, and regional organizations. Our members are from both public service and private practice in the fields of surveying, mapping, photogrammetry, and remote sensing.

Historically, procurement of surveying and mapping services by the Corps of Engineers has been by the traditional method, which is based on the demonstrated competence and qualifications of interested firms. The term "traditional" refers to the long-established procedures codified in the "Brooks Bill," Public Law 92-582, and adopted in DAR section 18-402.1 for use in the Corps procurements.

During the past sixteen months the Corps has found it necessary to revise its method of procurement of surveying and mapping services due to interpretations by its legal staff. Until earlier this month, the Corps was awarding surveying and mapping contracts on the basis of a low bid in most states, as outlined in Engineer Circular 715-1-73 dated May 14, 1983 (copy attached, Attachment 2). However, as a result of action by the Armed Services and Appropriations Committees, the Corps is now using the traditional method of negotiating surveying and mapping contracts.

In a letter to the Energy and Water Appropriations Subcommittee (Attachment 3), Lt. Gen. J. K. Bratton, Chief of Engineers, suggests that clear and unambiguous authority to negotiate is still absent. Therefore, ACSM-ASP urges the Committee to include in its Water Resources Authorization, language to clarify for the Corps and other Federal agencies that the traditional negotiation method based on qualifications should be used in contracting for surveying and mapping services. Specifically, we suggest the following language:

> "Contracts for architecture, engineering, surveying and mapping services shall be awarded in accordance with title IX of the Federal Property and Administrative Services Act of 1949 (40 U.S.C. 541 et seq.)."

IMPORTANCE OF SURVEYING AND MAPPING SERVICES IN WATER RESOURCE PROJECTS

Professional surveying and mapping services are critical to the broad range of design endeavors related to the land and water, including all phases of construction and navigation. The surveys and maps our professionals develop become integral parts of every Corps project, including project planning and funding, real estate acquisition, engineering and design construction layout, and contract payment. The professional surveyor is the first person on the project site and he works closely with other professionals in site location, access to the project, and logistical planning. He designates the proper positions, for example, for pilings and building foundations, the area to be excavated or filled for a road, the position of bridge piers, and the route of a water or sewer line. During construction, the surveyor provides correct elevations for, among other things, floor slabs, steel beams, sewer pipes, and road services. When construction is completed, the surveyor's field notes and drawings comprise the permanent construction record. Accurate survey work, therefore, is essential to fulfilling the Corps' mission.

In recent years, the Corps has contracted with private firms approximately $50 million annually for surveying and mapping services. While this is a substantial investment by the Corps, it is important to note that surveying and mapping services account for a very small percentage of total project cost, usually less than 5 percent. Further, the percentage becomes even smaller, less than one-half of one percent, when compared to total life cycle of any project. Yet the surveys and maps used by the Corps are a vital part of the entire life of the project.

Just as a poorly designed dam can burst, subjecting the government to huge damage claims, so too can a poorly planned or executed survey unleash a flood of problems, creating an impediment to the expeditious completion of a Corps civil works project, causing substantial loss of time and money, and jeopardizing the public safety. Like a well made dam, however, a high quality survey and map will stand the test of time and will ensure that the Corps can proceed with its design and construction based on confidence that complete and precise groundwork has been completed.

LEGISLATIVE HISTORY AND LEGAL PRECEDENT SUPPORTS CONGRESSIONAL ACTION ON TRADITIONAL PROCUREMENT

There is ample precedent for use of the traditional procedures for surveying and mapping procurement, as the attached documents explain in detail (see Attachment 1). Further, it is important to recognize that when the General Accounting Office has asserted new interpretation of or change in the traditional procurement method, Congress has insisted this procedure remain intact. This happened not only when, in 1972, Congress passed the Brooks Bill in response to a 1967 GAO Report, but also just recently when Congress passed P.L. 97-214, the Military Construction Codification Act.

That Act, which was passed by Congress and signed by the President after the Corps issued EC 715-1-73, further clarified the intent of Congress that Brooks Bill procedures should be used by the Corps and other military agencies for the procurement of surveying and mapping, as well as architectural and engineering services, required for military construction and military family housing projects. The Act (sec. 2855) codifies the authority to use Brooks Bill procedures for military construction procurements. Specifically, it states:

> "2855. Law applicable to contracts for architectural and engineering services and construction design
>
> Contracts for architectural and engineering services and construction design in connection with a military construction project or a military family housing project shall be awarded in accordance with title IX of the Federal Property and Administrative Services Act of 1949 (40 U.S.C. 541 et seq.)."

The report of the House Committee on Armed Services, H. Rept. 97-612, further clarifies and defines the intent when it states:

> "Architectural and engineering services and construction design include all engineering services and design required for a proposed military construction project-site investigations, surveys and mapping, sketches, preparation of cost estimates for construction and land acquisition projects, plans, specifications and construction documents." (Emphasis added) (page 19).

As this language does not apply to the Corps Civil Works directorate, the House and Senate Appropriations provided language in their FY '83 bills. Sec. 208 of H.R. 7145 and Sec. 204 of S. 3079 (97th Congress, 2nd Session) provide that

> "Contracts for architect and engineering services, and surveying and mapping services, shall be awarded in accordance with title IX of the Federal Property and Administrative Services Act of 1949 (40 U.S.C. 541 et. seq.)."

When Congress passed the Continuing Appropriations for FY 1983 in lieu of a regular Energy and Water Development Appropriation Bill, the Committee of Conference of the House and Senate advised in the report to accompany the continuing appropriations (H.J. Res. 631, P.L. 97-377) that "(I)n order to provide greater program direction, agencies under the jurisdiction of the Energy and Water Development Subcommittee are directed to use House Report 97-850 and Senate Report 97-673 which accompany the fiscal year 1983 appropriation bills in implementing the provisions of this resolution." (Pages 184-185)

House Report 97-850 (page 176) notes that "(L)anguage under General Provisions in Title II provides that contracts for architect and engineering services, and surveying and mapping services shall be awarded in accordance with Title IX of the Federal Property and Administrative Services Act of 1949."

It was in response to this language that Gen. Bratton wrote Representatives Bevill and Myers indicating both the new Corps procedures and the need for clear and unambiguous language.

THE TRADITIONAL METHOD OF PROCUREMENT IS COMPETITIVE, AND COST-EFFECTIVE

Historically, for the Corps and for other agencies, the traditional method for selecting surveyors, mappers, architects, and engineers has proven quite competitive. As Senator Gurney explained during consideration of the Brooks Bill:

> "any Federal procurement officer . . . will tell you that competition based on professional-technical qualifications is every bit as hot and demanding as competition based on price, perhaps more so."

The mere fact that one surveyor's price is favorably low by no means ensures that it is "competitive." Comparatively low prices (which may be the result of unprofessional errors) are competitive only if the surveyor subsequently performs in a trouble-free manner as would a higher priced surveyor. Price competition is not a valid assurance of competition. Indeed, when it is relied on in the selection process, it normally permits a selection decision that deemphasizes the more difficult evaluation of qualifications.

Unlike materials or commodities, or many construction-related services which are readily susceptible to spot checks or inspections, a survey or map cannot be sampled and thoroughly tested during (or even after) contract performance. A professional surveyor's experience and reputation, however, can provide important safeguard criteria by which to evaluate or predict performance under a contract. Use of traditional selection procedures assures that the professional selected to provide the initial framework for all ensuing design and construction work is the best qualified to fulfill this initial requirement.

Traditional procedures guarantee that services of the highest quality will be obtained to provide the initial framework and the basis for all ensuing design and construction projects. This does not mean, however, that the use of these traditional procedures leaves the Corps without any valid safeguard against unnecessarily high prices. The Corps of Engineers is one of the largest and most sophisticated purchasers of professional services, and should never doubt its ability to negotiate a fair price. The Corps, therefore, is almost uniquely qualified among Federal agencies to appreciate and establish an appropriate fee range for any given survey requirement.

In summary, the built-in safeguards that exist under traditional or Brooks Bill procedures have proven to be effective both from a standpoint of quality performance and cost.

Despite the fact that substantial legal authority exists for the Federal government to procure surveying and mapping services on the basis of qualifications, the Corps' counsel has determined that further statutory clarification is needed in order to return to the traditional procedures for procuring surveying and mapping services.

ACSM-ASP urges the Committee to provide clear authority in its water resources authorization bill, with the language we have suggested. This clarification will allow the Corps to resume its practice of assuring the public that quality surveying and mapping services at the greatest possible value will be procured.

We appreciate this opportunity to present our views and look forward to working with the Committee on this important issue.

Attachment 1

APPLICABLE REGULATIONS AND YEARS OF ADMINISTRATIVE PRACTICE ESTABLISH THAT TRADITIONAL PROCEDURES HAVE BEEN EMPLOYED TO MEET PROFESSIONAL SURVEYING AND MAPPING REQUIREMENTS

Military regulatory provisions implementing various statutory directives pertaining to architectural, engineering, and the directly related professional services of surveying and mapping can be traced to a 1952 Department of Defense Directive establishing "Uniform Standards for the Employment and Payment of Architect-Engineer Services."*/ The selection procedures set forth in the Directive provided that:

> The selection of architectural and engineering firms for the preparation of plans and specifications for public works or for other technical and professional services, such as master planning, engineering studies, and investigations, will not be based upon competitive bidding procedures but solely upon the professional qualifications necessary . . . . (Id., Part I) (emphasis added).

"[O]ther technical and professional services" were not restricted to services provided only A-E firms. This was made clear by the selection procedures followed by the Corps, and written guidelines in effect for at least thirty years.

For example, in 1963, the Department of Defense published a booklet**/ to provide guidance to "professionals interested in furnishing professional services to the Department of Defense in connection with the design of military public works projects." The 1963 booklet's definition of "architect-engineer" is still in effect:

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*/ Department of Defense Directive 4105.45, "Uniform Standards for the Employment and Payment of Architect-Engineer Services" (June 25, 1952).

**/ Department of Defense, "How to Obtain Consideration for Architect-Engineer Contracts with the Department of Defense" (Jan. 1963).

> The term "architect-engineer" as used in this pamphlet includes planners, architects, engineers, consultants, . . . and all similar or related professional firms. (Id., § I; See also June 1976 ed.) (emphasis added).

In describing the DOD's A-E selection policy, the booklet has observed:

> The selection of architect-engineer firms for the preparation of plans and specifications of military public works projects, or for other professional services such as master planning and architectural-engineering studies as based upon the professional qualifications necessary for the satisfactory performance of the services required, and not on competitive bidding procedures. (Id., § IV) (emphasis added).

The provisions of the 1952 Directive also were incorporated in the Armed Services Procurement Regulations (ASPR),*/ which in turn were superceded by the Defense Acquisition Regulations (DAR). The DAR provisions covering A-E selection procedures establish that:

> As provided by section 902 of Public Law 92-582 [the Brooks Bill] . . . , it is the policy of the Federal government to publicly announce all requirements for architect-engineer services, and to negotiate contracts for such services on the basis of demonstrated competence for the type of professional services required and at fair and reasonable prices. (32 C.F.R. § 18-402.1) (emphasis added).

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*/ See §§ 15-104, 15-400, 18-108.2, 18-303.1, and 18-303.3 of the ASPR, or the DAR contained in 32 C.F.R. Parts 1 through 39, Vol. III, at vii. Once incorporated in the ASPR, the 1952 Directive (which had been renewed without change in 1962) was cancelled in 1972.

The language of this regulation reflects the fact that the traditional procedures codified in the Brooks Bill and adhered to by all Federal agencies for decades applied with equal force to the military. As the Corps' memorandum of May 8, 1981 establishes, the legislative authority to apply these procedures existed and was followed for decades before the 1972 passage of the Brooks Bill.[*/] Promulgation of DAR § 18-401 merely acknowledged that "Brooks Bill" procedures are consistent with the procedures traditionally applied by the military pursuant to broad legislative authority that existed prior to 1972. This authority is underscored annually in the Military Authorization Acts. See discussion at pages 21, 27-28.

In another section of the DAR (32 C.F.R. § 16-400), prescribing the use of forms for construction and architect-engineer contracts, two "Architect Engineer and Related Services Questionnaires" (SF 254 and SF 255) are described:

> The Architect-Engineer and related Services Questionnaire (Standard Form 254) . . . shall be used whenever a construction activity desires to obtain such information for use in contracting for services of an architect-engineer nature relating to construction, alteration, or repair of buildings, bridges, roads, or other kinds of real property. Services related to construction include planning, engineering studies, investigations, development of design, preparation of plans and specifications and supervision of work performed during the construction period . . . . (Id. § 16-405.3) (emphasis added).

[*/] See "Applicability of DOD of the Architect-Engineer Selection Policies and Procedures Prescribed by the Brooks Bill" 1 (May 8, 1981). This memorandum was submitted by the Corps of Engineers at the request of the General Accounting Office for reconsideration of Association of Soil and Foundation Engineers, B-199548 (Sept. 15, 1980).

Standard Form 254 contains the following definition of purpose:

> The policy of the Federal government in procuring architectural, engineering and related professional services, is to encourage firms lawfully engaged in the practice of those professions to submit annually a statement of qualifications and performance data. Standard Form 254 . . . is provided for that purpose . . . . (*Id.*) (emphasis added).

Standard Form 254 defines "architect-engineer and related services" as:

> those professional services associated with research, development, design, construction, alteration or repair of real property, as well as incidental services that members of these professions and those in their employ may logically or justifiably perform, including studies, investigations, surveys . . . . (*Id.*) (emphasis added). */

The definition set forth in SF 254 is repeated in SF 255, "Architect-Engineer and Related Services Questionnaire for Specific Project." According to the statement of purpose in SF 255:

> The procurement official responsible for each proposed project . . . shall select firms for subsequent discussions leading to contract award in conformance with P.L. 92-582. This form should be filed by an architect-engineer or related service firm when requested to do so by the agency or by a public announcement . . . .

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*/ The definition of "architect-engineer and related services" contained in Standard Form 254, including the specific reference to "surveying," is identical to that developed by the GSA in its regulations to implement the Brooks Bill. *See* 41 C.F.R. § 1-4.1002(c).

SF 255 instructions also direct respondents to show their field of registration and the year of registration if "registered as an architect, engineer, surveyor . . . ." Instruction Item 7 (emphasis added).

The foregoing discussions of Standard Forms 254 and 255 are mentioned because they illustrate long-established practices that both civilian and military agencies have applied to the surveying profession. (41. C.F.R. § 1-16.803; 32 C.F.R. (DAR) § 18-403). First, the forms apply to and are filed both by A-E firms and by "related service firms." Second, all firms that file these forms, whether A-E firms or related service firms, must be selected pursuant to the traditional procedures in conformance with the Brooks Bill, Public Law 92-582.

Other sets of federal regulations also prescribe procedures for procuring architect, engineer, and directly related professional firms. For example, the National Aeronautics and Space Administration (NASA), through the construction organization of the Corps of Engineers, has published procedures that define "architect-engineer services" to include services required in connection with preparation of designs, plans, drawings, and specifications for a proposed construction project (referred to as Title I Services). See 41 C.F.R. § 18-4.201(9). Section 18-401(b) defines Title I Services to include:

> (1) Preparation of necessary topographical and other field surveys, test borings and subsurface investigations . . . . (emphasis added).

The Federal Procurement Regulations (FPR) are generally applicable to all nonmilitary departments of the Federal Government for procurement of professional architect-engineer services. See 41 C.F.R. § 1-4.1002(a). Under these regulations, the definition of "architect-engineer services" is identical to the definition found in SF 254 and SF 255 (quoted above).

The DOD, NASA and FPR regulations contain essentially the same language used prior to the 1972 enactment of the Brooks Bill. These regulations conform with the understanding and practice over the years, by all agencies, of applying the same, traditional procedures to professional surveying and mapping procurements as are applied to other A-E and A-E related professions. Until September of 1980, when EC 1180-1-171 was published, the Corps also had adhered to this established practice, both before and after enactment of the Brooks Bill in 1972.

The administrative practice of the Corps up until the issuance of EC 1180-1-171 was to procure professional surveying and mapping services in accordance with DAR § 18-401 et seq. The abrupt departure by the Corps from this practice brought about by its issuance of EC 1180-1-171 has been objected to in the Corps' field comments and observations. No administrative or legislative action has occurred which would compel the Corps by regulations to deemphasize qualifications at this time in filling future requirements by professional surveyors and mappers.

Several Comptroller General decisions have been issued regarding the statutes and administrative practice governing the procurement of architectural, engineering, and related professional services. The most notable action was the Comptroller General's decision in Ninneman Engineering B-184770 (Mar. 9, 1977) (reconsideration). In the first Ninneman decision, 85-year old Jack Ninneman represented himself in his bid protest without knowledge of the legal precedents for surveying procurement by negotiation. After Mr. Ninneman prevailed, and without his knowledge, the Forest Service requested reconsideration. On reconsideration, the GAO adopted the Forest Service's arguments.

The GAO and the Forest Service concluded that because the cadastral survey involved in Ninneman was not related or "incidental" to any potential construction project, the survey properly could have been (but was not required to be) procured under competitive statutes and regulations. As set forth in the next section, however, the Brook Bill's legislative history strongly suggests professional "incidental services" have always been understood to include those professional services, such as surveying and mapping, that are associated with or incidental to A-E services. The GAO and the Forest Service interpretation that "incidental" meant a service incidental to a particular construction project was a departure from the long-standing administrative practice that was codified by the Brooks Bill. Neither the GAO nor the Forest Service, however, questioned the applicability of traditional procedures to construction-related surveying and mapping services. For purposes of this memorandum, it is also important to note that the Comptroller General in Ninneman upheld the Forest Service's authority to follow the procedures used. No decisions have been found in which the Comptroller General has concluded that the Corps (or any other agency) lacked the authority to follow traditional (or Brooks Bill) procedures in selecting professionals. Indeed, in a 1966 opinion, the Comptroller General set forth a list of "the types of A-E services" which included "[s]urveys: topographic, boundary utilities" among the services excluded by the General Services Administration from the six percent limitation.*/

Historically, both within and without the Corps, surveying and mapping services have been procured on the basis of qualifications, and demonstrated competence. This established practice should be given considerable weight now, since the Congress has reviewed the application of the traditional negotiated procurement procedures to these "related" professional services and has left the long-standing practice untouched. As the Supreme Court has pointed out,[7] history such as this of administrative construction and Congressional acquiesence should "add a gloss or qualification to what is on its face unqualified statutory language." Saxbe v. Bustos, 419 U.S. 65, 74 (1974). The next section sets forth the unqualified statutory language that supports the Corps' application of traditional procedures in procurement of professional surveying and mapping services.

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*/ See U.S. Comp. Gen., B-152306, Government-wide Review of the Administration of Certain Statutory and Regulatory Requirements Relating to Architect-Engineer Fees, Report to the Congress 67 (Apr. 20, 1967) (reprinting the 1966 opinion).

V. LONG-STANDING AUTHORITY HAS ALLOWED FOR THE APPLICATION OF TRADITIONAL PROCEDURES FOR THE SELECTION OF PROFESSIONAL SURVEYING AND MAPPING SERVICES

As discussed in previous sections, both Federal civilian and military agencies for decades have followed the "traditional" method of contracting for services of professional architects, engineers, surveyors, and mappers. In 1972, the Congress enacted the "Brooks Bill", Pub. L. No. 92-582, 40 U.S.C. §§ 541-544, with the express purpose of codifying those procurement procedures that for nearly a century had been invariably referred to as the "traditional" procedures.*/ This rather general yet universally understood reference is some indication of the degree to which "traditional" procedures were followed.

While statutes, legislative histories, implementing regulations, and industry publications are replete with instructions to use the traditional method to obtain professional A-E, surveying or mapping services, nowhere is this authority codified or consolidated except in the Brooks Bill. Its enactment was, in part, in response to a 1967 Report to the

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*/ The Brooks Bill (P.L. 92-582), which amended the Federal Property and Administrative Services Act (40 U.S.C. § 251 et seq.), added two features to the "traditional" selection procedures: (1) all A-E and related professional services requirements had to be publicly announced (Section 902 of the Act); and (2) discussions with firms "regarding anticipated concepts and the relative utility of alternative methods of approach" were required (Section 903 of the Act).

Congress by the General Accounting Office recommending legislative clarification. This section of the memorandum discusses the precedents on which that law was based.

A. For Over a Century, Legal Precedents Have Contemplated the Use of Traditional Selection Procedures to Procure Professional Surveying and Mapping Services.

The basis for present statutory authority for procurement of personal and professional services, such as surveying and mapping, can be traced back to an 1861 appropriations Act. 12 Stat. 214 (1861). This Act provided for the appropriation of funds for various purposes, including the compensation of civilian surveyors. Section 10 directed that all contracts for supplies or services be made by advertising for proposals "except for personal services." Id. at 220. A year later, the Attorney General ruled that a contract for surveying was a contract for personal services within the meaning of the Act and, therefore, could be made without advertisement and competitive bidding. 10 Op. Atty. Gen. 261 (1862). In reaching his decision, the Attorney General observed:

> . . . although this policy [price competition] is certainly desirable in all cases, there are yet some to which it cannot well be applied. Such are contracts for services which require special skill and experience. . . . In all contracts for services which presuppose trained skill and experience, the public officer who employs the service must be allowed to exercise a judicious discrimination, and to select such as, in his judgment, possesses the required qualifications.

> Of this class are contracts for surveying the public lands. The service to be performed requires not only fidelity and integrity, but a certain kind of skill and knowledge, and the officer whose duty it is to let the contract, is bound to know that the person he employs possesses these qualifications. It is not half so important to have the work done cheaply as to have it done well, and the price to be paid for it, whilst it should be but fair and reasonable, ought to be far from the controlling consideration. (*Id.* at 262)(emphasis added)

Military and civilian agencies relied upon the authority of the 1861 Act to select professional services of architects, engineers, surveyors and mappers until the late 1930's. As several Comptroller General decisions have made clear regarding the authority conferred by the 1861 Act, agencies have authority to employ outside professional services under contract only when, due to the technical nature of a project, the use of regular government employees would not be adequate.*/

From 1939 until 1972, the Congress enacted a number of statutes whose provisions and legislative history referenced selection of A-E and other professional consultants' services by traditional negotiation -- rather than competitive bidding -- procedures. For example, in 1939 the Congress provided authority**/ for the Secretary of War to procure A-E and related services without regard to certain other statutory

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*/ *See, e.g.*, 6 Comp. Gen. 987; 13 Comp. Gen. 351; 14 Comp. Gen. 909.

**/ 53 Stat. 1240 (1939) (now codified at 10 U.S.C. § 4540(a) (1976)). The 76th Congress enacted similar legislation, which also is still in effect, granting the Secretary of the Navy authority to contract with outside A-E firms. *See* 53 Stat. 591, 10 U.S.C. § 7217 (1976).

requirements. Section 2 of the 1939 Act provided:

> . . . The Secretary of War is hereby authorized to employ, by contract or otherwise, outside architectural or engineering corporations, firms, or individuals for the production and delivery of the designs, plans, drawings, and specifications required for the accomplishment of any public works or utilities project. . . */

The Senate Report explained the purpose of Section 2 as follows:

> Expansion of the Army in an emergency must of necessity be preceded by field investigations and the preparation of plans and specifications for the erection of structures, and provision of public utilities.
>
> Past experience has shown that to achieve such expansion the War Department must avail itself of the services of private individuals and organizations. The expansion of the professional and engineering forces within the War Department cannot be accomplished expeditiously. . . . The obvious alternative is to engage the services of private engineering and architectural firms or individuals to supplement the work of the War Department.

S. Rep. No. 667, 76th Cong., 1st Sess. 2 (1939).

Agreeing with the War Department's contention that services required for "field investigations" and "the preparation of plans and specifications" should not be procured

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*/ The 1939 Act cited Section 3709 of the Revised Statutes, which was derived from the 1861 Act that exempted personal service contracts from competitive bid requirements. Section 3709 now appears at 41 U.S.C. § 5, and provides that: "Contracts for . . . services for the Government may be made . . . only after advertising . . . except . . . when the services are required to be performed by the contractor in person and are (A) of a technical and professional nature. . ."

on the basis of price competition, the Senate Committee on Military Affairs concluded that:

> It is as illogical to advertise for the services of an architect or engineering specialist as it would be to advertise for the services of a medical specialist. . . . The question of the magnitude of the fee does not enter into the selection of an engineering or architectural firm. The question in each case should be decided upon the special qualifications of the firms under consideration. (Id. at 3)

In 1941, the Congress expanded this DOD authority to negotiate contracts for services of "architects, engineers, or firms or corporations thereof and other technical and professional personnel as may be necessary." Pub. L. No. 77-139, 55 Stat. 366 (1941) (emphasis added). The reason for the expansion was explained during the Senate floor debate of the legislation:

> The changes suggested by the Committee will enable the Department to employ the services of consultants not only in connection with the production of plans and specifications required for any War Department project and for supervision of its accomplishment but also in connection with any problem which in the opinion of the Secretary requires the services of experts.

Cong. Rec. S5706 (daily ed. June 27, 1941)(emphasis added).

Significantly, Military Appropriations Acts enacted between 1942 and 1947 continued the War Department's authority to use traditional negotiation procedures to procure the services of "other technical and professional personnel" as well as A-E services.[*/] The Senate Armed Services Committee Report accompanying the legislation explained that the language

> will enable the Department to employ the services of consultants not only in connection with the production of plans and specifications required. . .but also in connection with any problem which in the opinion of the Secretary requires the services of experts.

S. Rep. No. 476, 77th Cong., 1st Sess. 12 (1941).

Important changes also were made in a 1946 Authorization Act to expand the Secretary's authority to use negotiation procedures for "personal service" contracts:

> when the services are required to be performed by the contractor in person and are . . . of a technical and professional nature. . . . When authorized in an appropriation or other Act, [the Secretary] may procure the temporary . . . services of experts or consultants . . . by contract.[**/]

[*/] Pub. L. No. 77-139, § 8, 55 Stat. 393 (1941). One of the subsequent Acts was Pub. L. No. 79-515, 60 Stat. 541 (1946).

[**/] Pub. L. No. 79-600, § 9, 60 Stat. 806 (1946). Another purpose of this Act was to avoid the recurring enactment of legislative language in appropriation Acts authorizing procurement of A-E and other professional services by the traditional method. Consequently, when Congress enacted the Military Appropriation Act of 1948, references to "the services of architects, engineers, . . . and other technical and professional personnel" (language set forth in Section 8 of the 1942 through 1947 Military Appropriation Acts) was superceded by a much more general provision stating that "whenever the Secretary of War should deem it advantageous to the national defense. . . he is hereby authorized to procure services as authorized by section 15 . . . of Public Law 600." Pub. L. No. 80-267, § 7, 61 Stat. 570 (1947). This authority has been continued by the Congress up to the present in the enactment of appropriation Acts for the military agencies. See, e.g., Pub. L. No. 97-114, § 703.

The next significant statutory development affecting the procurement of architect, engineer and surveyor services occurred with the enactment of the Armed Services Procurement Act of 1947. Pub. L. No. 80-413, 62 Stat. 21 (1948). This statute directed that:

> all purchases and contracts for . . . services shall be made by advertising . . . except that such purchases of contracts may be negotiated without advertising if . . . for personal or professional services . . . or otherwise authorized by law. (Id., § 2(c)(4), (17).)

According to the legislative history, the "personal or professional services" exemption was:

> an adaption of the exception from advertisement heretofore provided by Revised Statute 3709 (12 Stat. 220; 41 U.S.C. 5). . . with respect to contracts for services which are required to be performed by the contractor in person and which are (a) of a technical and professional nature. . . .*/

The most important instruction in the Act -- and one the Corps always heeded until it proposed EC 1180-1-171 -- was that the details of a given procurement's requirements were to be left to the judgment of the agency head when negotiating an agreement. The only admonition from the Congress was that the contract negotiated "should promote the best interests of the government." Pub. L. No. 80-413, § 4, 62 Stat. 23 (1948). The thrust of this statutory authority remained unchanged through a major codification in 1956 of the laws governing the Armed Forces.*/

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*/ S. Rep. No. 571, 80th Cong., 2d Sess., reprinted in [1947] U.S. Code Cong. & Ad News 1054 (emphasis added). With regard to the authority to negotiate contracts "if otherwise authorized by law," the Senate Committee Report included the following statutes as "illustrative":

> Act of August 7, 1939 (53 Stat. 1240, 5 U.S.C. 221), authorizing the Secretary of War to employ civilian engineers or architects for the design and planning of public works; and Act of August 2, 1946 (60 Stat. 810; 5 U.S.C. 55a), authorizing the employment of experts on a temporary basis, without regard to the provisions of Revised Statute 3709.

Id. at 1062-3.

The common thread in all of these various enactments was that procurement of professional personnel, such as architects, engineers, surveyors and mappers, should be exempt from the various statutory requirements for military procurement by competitive price bids. The rationale for this policy decision, which the Congress made repeatedly from 1861 on, was that contracts for such services should be negotiated on the basis of demonstrated competence and qualifications for the type of professional services required and at fair and reasonable prices.

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*/ See Pub. L. No. 84-108, 70 Stat. 1 (1956) (codified at 10 U.S.C. §§ 2304 (a)(4), (17), 4540 (1976)). The source for § 4540 was the 1939 Act granting the Secretary of War authority to procure A-E services. See 53 Stat. 1240. While there were minor changes in the language, this was not deemed significant inasmuch as the object of the codification was to "restate existing law, not to make new law." See S. Rep. 2484 84th Cong., 2d Sess., reprinted in [1956] U.S. Code Cong. & Ad. News 4640.

B. The Brooks Bill Codification Simply Clarified Long-Standing Traditional Procedures Implemented Under Earlier Military Statutes

By 1967, negotiated procurements by the military agencies took one of two approaches. Certain negotiated procurements had begun to place more emphasis on the price factor.*/ Procurements of professional services, however, continued to rely on the traditional method that stressed qualifications, in accordance with the above referenced statutory requirements. This bifurcated approach, in part, prompted the Comptroller General to submit a 1967 Report to the Congress regarding the procedures by which Federal agencies were selecting A-E contractors. _See_ U.S. Comp. Gen., B-152306, _Government-wide Review of the Administration of Certain Statutory and Regulatory Requirements Relating to Architect-Engineer Fees_, Report to the Congress (April 20, 1967). The Report contended that the new "competitive negotiation" requirements to consider "price, and other factors" was not being followed. _Id._ at 27. The Comptroller General recognized, however, that there was some basis and justification for the use of the "procedures presently being followed in the negotiation of A-E contracts and that the present methods of negotiating A-E contracts are based on well-established traditional methods of doing business with A-E s." Id. at 32. The Report concluded that "in view of past administrative practices in the procurement of such services, it is important that the Congress clarify its intent" and if it deemed it appropriate, "specifically provide for an exemption for this type of procurement" from the competitive negotiation requirements. Id. at 33.

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*/ In 1962, the Congress enacted Pub. L. No. 87-653, 76 Stat. 528 (1962), further amending the Armed Services Procurement Act of 1947 to require that negotiated procurements use the following procedures:

> proposals shall be solicited from the maximum number of qualified sources consistent with the nature and requirement of the . . . services to be procured and written or oral discussions should be conducted with all responsible offerors who submit proposals within a competitive range, price and other factors considered. . . .

The Congress' first response to the Comptroller General recommendation came in 1968. During consideration of legislation to authorize appropriations for the Armed Services, Congress decided to emphasize that proposals "including price" shall be required when utilizing the authority to negotiate contracts. See 10 U.S.C. § 2304(g)(1976). However, in the Conference Report explaining the rationale for this provision, the Conferees emphasized that price competitive proposals were not required when procuring A-E services:

> The Conferees wish to make it entirely clear that their agreement on the inclusion of this language in the bill is not intended to modify in any way the traditional method of procuring architect-engineer services.

H. Rep. No. 1869, 90th Cong., 2d Sess. 10 (1969)(emphasis added).

A-E procurement procedures applicable to the military also were considered during enactment of the Military Construction Authorization Act of 1970. Pub. L. No. 91-511, 844 Stat. 1204 (1970). At that time the Defense Department was considering a test of price competition for the procurement of A-E services.*/ Explicitly rejecting such a test, the Congress directed that:

> architect and engineering contracts. . . unless specifically authorized by the Congress shall continue to be awarded in accordance with presently established procedures, customs and practices . . . .

Pub. L. No. 91-511, § 604 (1970) (emphasis added).

Representative Rivers, then Chairman of the House Armed Services Committee, explained the purpose of the provision:

> In the language regarding architectural and engineering contracts in Section 604, it is the intendment of the Congress that architectural and engineering contracts should not be awarded through the competitive bidding procedure, as now proposed in a pilot program by the Department of Defense, unless specifically authorized by the Congress. It was the unanimous and enthusiastic agreement among the Conferees that contracts for the services of architectural and engineering firms should continue to be awarded in accordance with presently established procedures, customs and practices.**/

The provisions of Section 604, requiring that architect and engineering contracts be awarded in accordance with traditional procedures, have been enacted in all subsequent military construction authorization Acts, including the one for fiscal year 1982. See H.R. 3455, 97th Cong., 1st Sess., § 704 (1981).

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*/ See exchange of letters outlining the DOD Price Competition Experiment, 116 Cong. Rec. 39077 (1970).

**/ The reference to the "enthusiastic agreement of the Conferees" was to the 1969 Conference Report language cited above. Chairman Rivers later stated, during the House debate on the 1970 bill, that he wanted to emphasize to DOD that the Congress insisted on use of the traditional method to procure A-E services. See id. at 39078.

In 1972, the Congress responded a third time to the Comptroller General's request for clarification of the laws for procurement of A-E services by enacting Public Law 92-582, the Brooks Bill. 86 Stat. 1278 (codified at 40 U.S.C. §§ 541-544 (1976)). The purpose of the Act was: "to establish Federal policy concerning the selection of firms and individuals to perform architectural, engineering, *and related services for* the Federal government." *See* Preamble to Pub. L. No. 92-582, 86 Stat. 1278; H. Rep. No. 1188, 92d Cong., 2d Sess. 1 (1972) (emphasis added).

This government-wide policy reflected the traditional approach used by both military and civilian agencies for many years. As the Senate Report explains:

> Congress has made it clear on several occasions (e.g., H. Rept. 90-1869) that the traditional method of selecting architects and engineers is to be followed by the military agencies. . . .
>
> Since the *military agencies* are currently following the architect-engineer selection procedures as set forth in H.R. 12807, and *would be expected to continue such procedures in accordance with the statement of policy* contained in H.R. 12807, further amendment to the military procurement law is not deemed necessary.*/

The Brooks Bill defined "architectural and engineering services as including,

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*/ S. Rep. No. 1219, 92d Cong., 2d Sess., *reprinted in* [1972] U.S. Code Cong. & Ad. News 4771-2.

> those professional services of an architectural or engineering nature as well as incidental services that members of these professions and those in their employ may logically or justifiably perform.

40 U.S.C. § 541(3) (1976). According to the Senate Report, the definition

> *requires the utilization of the method of selection* provided in the bill for the procurement of architectual or engineering services, or *also when the scope and nature of the proposal, to a substantial or dominant extent, logically falls within the unique expertise of these professions*. . . .The purpose of this definition is to encompass *all of the services* which architects and engineers might logically or justifiably perform.*/

The choice of definitional language used by the Congress in the Brooks Bill was significant. Whereas the language in sections 1(1) and (2) defined the terms "firm" and "agency head" using the word "means" (a word of limitation), section 1(3) used the word "includes" (a term of enlargement indicating other terms are includable though not enumerated specifically) to define "architectural and engineering services." **/

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*/ S. Rept. No. 1219, 92d Cong., 2d Sess., *reprinted in* [1972] U.S. Code Cong. and Ad. News. 4773.

**/ *See* 40 U.S.C. § 541; 2A *Sutherland*, *Statutory Construction*, § 47.07 (3d ed.). Statutory construction by the Eighth Circuit Court of Appeals illustrates that the legislative choice of "includes" over "means" establishes that a broad definition was intended:

> Section 1(8) uses the word "includes" when setting out the types of organizations that come within the definition rather than the word "means". When a statute is phrased in this manner, the fact that a statute does not specifically mention a particular entity (labor unions) does not imply that the entity falls outside of the definition. *See Pfizer, Inc. v. Government of India*, 434 U.S. 308 (1978); *Helvering v. Morgan's Inc.*, 293 U.S. 121 125 n. 1 (1934); *Highway & City Freight Drivers, Etc. v. Gordon*, 576 F.2d 1285, 1289 (8th Cir. 1978).

The definition of A-E services also uses the words "as well as" in section 1(3). These words are more inclusive than the word "and," invoking the doctrine of ejusdem generis: when the specific words (architecural and engineering services) precede the general word (incidental), they are understood to embrace terms of equal or inferior rank. 2A Sutherland § 47.17 In addition, the terms "related," "incidental," and "ancillary" services were used throughout the Brooks Bill and its legislative history to include other professional services that historically have been related to A-E services, such as surveying and landscape architecture. The Preamble, as well as the legislative history, of the Brooks Bill reinforced an expansive reading of the term "incidental services." These sources stated as the express purpose of the legislation:

> to establish Federal policy concerning the selection of firms and individuals to perform architectural, engineering and related services for the Federal Government, . . . */

The reports went on to define "professional services as those of an architectural or engineering nature,

> . . . as well as ancillary services, that members of these professions and those in their employ may logically or justifiably perform. The purpose of this definition is

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*/ H.Rep. No. 1188, 92d Cong., 2d Sess. 1 (1972); S. Rep. No. 1219, 92d Cong., 2d Sess., reprinted at [1972] U.S. Code Cong. & Ad. News 4773.

> to encompass all of the services architects or engineers might logically or justifiably perform. */

During House and Senate debate on the legislation, clarification was sought regarding whether "the services of landscape architects would come within the confines of the proposed legislation." Representative Brooks, author of the bill replied that

> the bill would cover various types of architects insofar as the term implies that the individual is professionally trained and qualifies under appropriate State law to practice the profession. . . . Insofar as landscape architects are concerned, this bill would apply when the controlling jurisdiction under appropriate registration laws requires the persons acquire and maintain a proper level of professional excellence. **/

In the Senate, the following colloquy took place between Senator Jackson and Senator McClellan, author of the Senate bill:

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*/ Id.

**/ 118 Cong. Rec. 25492 (1972). A similar colloquy took place when the House debated and passed H.R. 16443, legislation similar to the Brooks Bill. Representative Brooks stated: "where the controlling jurisdiction under appropriate registration laws, required that persons acquire and maintain a level of professional excellence" then the A-E selection procedures set forth in the bill would apply. See 116 Cong. Rec. 39078 (1970).

> Mr. Jackson: I would like to know whether in the opinion of the Senator, the services of landscape architects are within the purview of H.R. 12807.
>
> Mr. McClellan: I see no exceptions in the language of this bill. This proposal obviously is intended to apply to all the various classifications and types of architects, if the individual providing the services is professionally trained and qualifies under appropriate state law to practice the profession . . . . 118 Cong. Rec. 36188 (1972) (emphasis added).

From the statutory language and legislative history of the Brooks Bill it is evident that the Congress intended to include in the term "architectural and engineering services" other directly related services, such as surveying and mapping, that traditionally have been considered professional services, whether or not they actually constitute services "of an architectural or engineering nature" (to use the words of the Brooks Bill).*/ The professional stature accorded to the surveying and mapping professions ranks them equal or at least incidental to A-E services, because they require similar professional skills, experience, educational and licensing qualifications.

Further indication that the definition of A-E services was broad in scope and the provisions of the bill were intended to cover other related licensed professionals is found in the following comments made during the Senate debate:

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*/ That greater specificity is not accorded to "surveying and mapping" can be attributed to the fact that, although this is changing, "surveying and mapping" traditionally have been considered a specialty of engineering. In "Legal Aspects of Architecture, Engineering, and the Construction Process," West Publishing Company (1970), Professor Justin Sweet writes: "There is an increasing tendency to break down registration laws by well-recognized specialities. For example, some states have special registration for landscape engineers. Also there is a tendency to break down engineering into its established specialties. Surveyors are often set apart for special registration requirements."

> Mr. Jackson: This legislation would not establish any new policy regarding the procurement of architect-engineer services by Federal agencies, but it *would confirm long-established existing practices whereby such professional services are secured by a professional selection and negotiation process* under which the emphasis is on professional qualification and expertise for the specialized services which are needed from time to time for the Federal agencies to carry out their missions. . . . we have over the years excluded professional services from the normal competitive bidding requirements for government purchase of services (41 U.S.C. 252(c), 10 U.S.C. 2304 (a), 41 U.S.C. 5). *Id.* at 36182 (emphasis added).

* * *

> Mr. Randolph: Ask 10 A-E firms to bid on the design of a particular facility and many agencies will take the easy way out and select the low bidder. Under such circumstances, we may end up with a technically capable architect or engineer, but one who, for lack of experience or because of a desire to stay within his bid *reduces the time spent on field surveys, or in the preparation of detailed drawings, or in providing inspection services. As a result, the government may have saved itself a half of one percent on the design fee while adding 5 to 10 percent to the cost of construction, operation or maintenance*. *Id.* at 36188 (emphasis added).

Senator Jackson's statement was useful in highlighting much of the precedents and statutory directives to the military and civilian agencies to use traditional negotiation procedures to procure personal professional services on the basis of professional qualifications and expertise.

For purposes of this memorandum, however, Senator Randolph's view of the importance of the Brooks Bill's procedures is far more significant. It capsulizes the points that have been made repeatedly in comments on EC 1180-1-171 and 3. First, given any kind of directive on price as a factor in negotiated procurements, many contracting officers will take the easy way out and select the low price. Second, to lower its proposal to the competitive range, even a technically competent A-E might under-price some components of its proposal on the mistaken belief that little expertise, effort, time or money is required. Third, someone who is technically competent to perform A-E work does not necessarily have the qualifications and experience that surveying and mapping professionsals require to prepare proper, reasonably priced field surveys, whether they are related to or independent of a construction project.

The fourth and final point is that competitive negotiation in the context of professional surveying services constitutes false economy. In contrast to EC 1180-1-173, Senator Randolph's support for the Brooks Bill was based in part on his concern that corners would be cut in conducting field surveys, which of course are performed by licensed surveyors. The Senator's statement would have made little sense if the Brooks Bill procedures did not cover procurement of field surveys.

While a few hundred or even thousand dollars might be saved by selecting the low bidder, the Government could run grave risks and ultimately higher overall costs for inspection services (if even practicable), construction adjustments, and operation and maintenance costs if short cuts were taken in the survey work to meet the low price bid.

Years of reliance on professional qualifications have helped to avoid these problems.

Attachment 2

DEPARTMENT OF THE ARMY
OFFICE OF THE CHIEF OF ENGINEERS
WASHINGTON, D.C. 20314

REPLY TO
ATTENTION OF:
DAEN-CWE-BU

7 June 1982

John C. Uehlinger
Acting Executive Director
American Congress on Surveying and Mapping
210 Little Falls Street
Falls Church, VA 22046

Dear Mr. Uehlinger:

As promised, I am forwarding a copy of our recently published Engineer Circular No. 715-1-73, Procurement of Surveying and Mapping Services, 14 May 1982 (Incl 1). This circular clarifies our policy for determining source selection procedures for procurement of surveying and mapping services.

The response submitted by ACSM, ASCE, ACEC and NSPE on 25 January 1982, while not altering the Corps' basic interpretation of P.L. 92-582 and applicable DOD regulations, did provide input to fine-tune portions of our policy guidance. As a result, EC 715-1-73 specifies that the determination of the source selection procedure will depend on which profession is required for performance of the work.

As you know, many surveying and mapping services do not require professional engineers for performance of the work and can and/or should require performance by land surveyors, geodesists, cartographers or photogrammetrists. We are presently preparing additional information to aid our field offices in the determination as to which profession is required for performance of various surveying and mapping services. This will assure that better source selection procedures are used and will achieve a degree of consistency in interpreting state registration laws.

Another related issue is the Small Business Administration's (SBA) small business size standards for surveying services. The SBA recently ruled on a size appeal concerning surveying services procured through competitive negotiation procedures and not requiring performance by a professional engineer. They determined that the proper classification for these surveying services was "services not elsewhere defined," having a size standard that average annual receipts for the preceding three fiscal years not exceed $2 million. We will conform with this ruling for similar services. However, we will continue to use the $7.5 million engineering services size standard for any services requiring the A-E selection procedure.

I would like to thank you for ACSM's efforts in meeting with us and discussing your membership's professional and legal views on this controversial issue. If you have any questions about the circular or its implementation, please feel free to contact us.

Sincerely,

Lloyd A Duscha

1 Incl
as

LLOYD A. DUSCHA, P.E.
Chief, Engineering Division
Directorate of Civil Works

DAEN-PRF
DAEN-CWE
DAEN-MPE

DEPARTMENT OF THE ARMY
US Army Corps of Engineers
Washington, D.C. 20314

EC 715-1-73

Circular
No. 715-1-73

14 May 1982

EXPIRES 30 JUNE 1983
Procurement

PROCUREMENT OF SURVEYING AND MAPPING SERVICES

1. Purpose: This circular sets forth interim policy for determining source selection procedures for procurement of surveying and mapping services.

2. Applicability: This circular applies to all field operating activities which procure surveying and mapping services.

3. Reference:

a. Public Law 92-582 (Brooks Act)

b. Defense Acquisition Regulation

4. Background:

a. Section 902 of Public Law 92-582 declares it to be the policy of the Federal Government to publicly announce all requirements for architect-engineer services, and to negotiate contracts for such services on the basis of demonstrated competence and qualification for the type of professional services required and at fair and reasonable prices. DAR Section XVIII, Part 4, sets forth procedures to be used in the procurement of architect-engineer services.

b. Section 901 of Public Law 92-582 defines architect-engineer services as "those professional services of an architectural and engineering nature as well as incidental services that members of these professions and those in their employ may logically and justifiably perform." Architect-engineer firms are defined as "any individual, firm, partnership, corporation, association, or other legal entity permitted by law to practice the profession of architecture or engineering." State law determines who is an architect or engineer and what services they are exclusively licensed to provide.

c. Land surveyors are also professionally licensed in all fifty states. Some state laws define land surveying as part of the profession of engineering, while others do not. State laws also define what services land surveyors are exclusively licensed to provide.

This circular supersedes ER 1110-1-1000, 15 Oct 1965

d. Geodesists, cartographers and photogrammetrists are other professionals who perform certain types of surveying and mapping services, but are not licensed nor defined as a part of the profession of engineering by the states.

5. Interim Policy:

a. The determination as to which profession is required to perform the work will be based on the professional engineer (P.E.) and land surveyor (L.S.) registration laws of the state in which the surveying project is located. Whenever state laws are unclear as to which profession is required, an engineering judgment will be made as to which profession should logically and justifiably perform the work.

b. The A-E selection procedure set forth in DAR Section XVIII, Part 4, will be used in the procurement of those types of surveying services requiring performance by:

(1) a P.E., or by

(2) a L.S. in any state whose laws define land surveying as a part of the profession of engineering.

c. The A-E selection procedure will not be used in the procurement of those types of surveying services requiring performance by a L.S. (except as specified in paragraph 5b(2)) or by a geodesist, cartographer or photogrammetrist.

d. The A-E selection procedure will not be used in the procurement of those types of surveying services which may be performed by either a P.E. or a L.S., geodesist, cartographer or photogrammetrist.

e. When a surveying and mapping project is located in more than one state and the A-E selection procedure is required, as specified in paragraph 5b, for any state involved, the A-E selection procedure will be used. Otherwise, the procedure will not be used. The selected firm will be required to meet registration requirements for all states involved.

f. Surveying and mapping services which will become an integral part of an A-E's design or engineering work are "incidental services" and, as such, may be included in the A-E's design or engineering contract and be performed by the A-E, its employees or its subcontractor.

g. Although it may be determined that the A-E selection procedure cannot be used, surveying services are considered professional services within the meaning of DAR 3-204. Surveys and maps become integral parts of project planning and funding, real estate acquisition, engineering and design, construction layout, and contract payment. These functions are directly dependent upon the quality of the surveying and mapping services and often involve unknowns which preclude development of specifications sufficient for procurement by formal advertising. Unlike other products or services, surveys and maps cannot be verified without completely reaccomplishing the surveying or mapping. Errors or inadequate surveys or maps take years to discover and can result in costly corrective actions. It is, therefore, important that surveying and mapping services be performed by the best qualified firm; competence, experience, price and other factors considered. Therefore, the competitive negotiation procedures of DAR Section III should be used when, for any of these reasons, formal advertising is not feasible or practicable. Technical evaluation factors should be developed by requirements personnel. Relative importance and weight of all evaluation factors, including price, should be developed jointly by requirements and procurement personnel.

FOR THE COMMANDER:

G. A. YAGER
Chief, Office of Contracting
Policy

DEPARTMENT OF THE ARMY
OFFICE OF THE CHIEF OF ENGINEERS
WASHINGTON, D.C. 20314

Attachment 3

April 1, 1983

REPLY TO
ATTENTION OF:

DAEN-CWE-BU

Honorable John T. Myers
Ranking Minority Member
Subcommittee on Energy and
  Water Development
House of Representatives
Washington, D.C. 20515

Dear Mr. Myers:

This is in response to your letter of March 7, 1983, regarding the method used by the U.S. Army Corps of Engineers to procure surveying and mapping services. This information is also being provided to Mr. Bevill.

Last year the Corps changed its method of procuring surveying and mapping services as a result of a determination by the Chief Counsel that the absence of clear legal authority prevented the use of "Brooks Act" (40 U.S.C. 541 et. seq.) procedures for the procurement of these services. The recent enactment of P.L. 97-377, whose accompanying conference report, H.R. 97-890, draws our attention to the guidance of page 176 of H.R. 97-850, as well as the recently enacted Military Construction Codification Act (P.L. 97-214), makes clear Congress' intent that the procurement of surveying and mapping services shall be subject to Brooks Act procedures. I appreciate the intent of Congress to clarify this matter and I am, therefore, directing the rescission of EC 715-1-73. Surveying and mapping services for both civil and military projects, will be procured in accordance with the policies and procedures of Title IX of the Federal Property and Administrative Services Act of 1949 (40 U.S.C. 541 et. seq.).

I would note, however, that clear and unambiguous statutory authority to negotiate under Brooks Act procedures is absent, and will continue to be absent unless and until legislation similar to that contained in Sec. 208 of H.R. 7145 is enacted.

Sincerely,

JK Bratton

J. K. Bratton
Lieutenant General, U.S. Army
Chief of Engineers

OMNIBUS WATER RESOURCES LEGISLATION COST SHARING

WEDNESDAY, JUNE 15, 1983

U.S. SENATE,
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS,
SUBCOMMITTEE ON WATER RESOURCES,
Washington, D.C.

The subcommittee met at 10:10 a.m., in room SD-406, Dirksen Senate Office Building, Hon. James Abdnor (chairman of the subcommittee) presiding.

Present: Senators Abdnor and Durenberger

OPENING STATEMENT OF HON. JAMES ABDNOR, U.S. SENATOR FROM THE STATE OF SOUTH DAKOTA

Senator ABDNOR. The Subcommittee on Water Resources will come to order.

The Committee on Water Resources is pleased to hear today from the Assistant Secretary of the Army for Civil Works, Mr. William Gianelli. Mr Gianelli is here today to present the administration's views on Federal cost-sharing policy for water resource development projects. I personally want to welcome the administration spokesman to this hearing. We in Congress have been awaiting this policy statement for some time, and I want to reiterate today the sentiments I related to the President last month.

Now is the time for Congress and the administration to squarely address cost-sharing policies for water resources. Together, I am convinced, a resolution of this long unresolved issue can be obtained. I believe that it is in this spirit of cooperation that Mr. Gianelli is here today.

Just one last comment. The Nation has been patiently awaiting for Congress to resolve the existing policy questions and get on with the task of developing our water resources projects. I hope that in the months ahead, we will look back to this hearing and see that today is the day that we turned the corner and began to put the pieces of a new water resources policy together. I welcome you, Mr. Gianelli.

You are accompanied by Mr. Dickey and General Edgar. We welcome all of you to the committee and anxiously await to hear your comments.

STATEMENT OF HON. WILLIAM R. GIANELLI, ASSISTANT SECRETARY OF THE ARMY (CIVIL WORKS), ACCOMPANIED BY G. EDWARD DICKEY, ECONOMIC ADVISER TO THE ASSISTANT SECRETARY FOR CIVIL WORKS; AND BRIG. GEN. C. ERNEST EDGAR III, DEPUTY DIRECTOR OF CIVIL WORKS, U.S. ARMY CORPS OF ENGINEERS

Mr. GIANELLI. Thank you very much, Mr. Chairman. It is a pleasure to have the opportunity to testify again before this subcommittee on the fundamental issues which must be addressed in defining a new national water policy.

As you indicated, I would like to have the record show Brigadier General Edgar is present at my left. Dr. G. Edward Dickey who is the civil works economic adviser on my right is also here. And both of these gentlemen will be available in addition to myself to respond to questions after my initial presentation, if the committee so desires.

It is also a pleasure to be here to be able to present the administration position on cost sharing for Federal water projects. My testimony today is the culmination of many months of discussion and debate within the administration on the most appropriate course to chart in this vital area of support to our national economic wellbeing.

Most of my prepared remarks today will be devoted to what the administration believes is the most critical issue facing the water development community. That issue, simply put, is: In the future, what will be the financial terms on which Federal assistance to water development will be provided? Reaching a new consensus that reflects today's economic realities and priorities is key to timely and orderly development of water projects. The water project cost sharing and financing policies which I shall outline today will guide future administration actions on all Federal water project development by some agencies, until some new agreement on this issue is reached between the executive and legislative branches.

To place the matter in perspective, Mr. Chairman, the Corps of Engineers is involved in water projects in all 50 States primarily for navigation and flood control. The Bureau of Reclamation is involed very deeply in 17 Western States, primarily for irrigation and the Soil Conservation Service operates pretty much throughout the country for erosion control and other purposes.

In the past, looking at it from a budgetary standpoint, the Corps of Engineers construction budget for water projects has been roughly about three times that of the Bureau of Reclamation and in turn the Bureau of Reclamation budget for construction of water projects has been roughly about three times that of the budget of the Soil Conservation Service.

Using the Corps of Engineers as an example, by any reasonable indicator, the cost of future civil works projects exceeds the available Federal financial resources now and in the foreseeable future. Everyone recognizes this. The scheduled balance, for example, to complete for active authorized projects now being funded by the corps totals some $10 billion. In addition, there are numerous projects in the unscheduled backlog of active authorized projects for the corps, some of which ultimately may be considered for construction at a potential cost of another $16 billion.

In addition to this inventory of authorized work, there has accumulated at the Washington level since the last Water Resources Development Authorization Act of 1976 more than 166 projects which are currently being considered for authorization. This last category of projects will cost another $10 billion and collectively the three categories represent $36 billion of future water project construction costs just for the Corps of Engineers.

Notwithstanding this continuing accumulation of unfunded work, this year, for the first time, the corps' O&M budget has exceeded that for construction. From a national budgetary perspective, Federal water funding continues to get a diminishing percentage of the Federal budget, and I think we can all agree that the prospect of getting substantial increases in Federal funds for water projects is highly unlikely when recognition is given to the fiscal condition of the Federal Treasury and the needs of the social programs and national defense.

What are the alternatives then? It seems to me there are two. First of all we can continue as we have for the last few years with very limited new authorizations or new construction starts. The political process might continue to allow some projects to proceed on some basis other than the soundness of the project itself. This, in my judgment, will not meet the Nation's water needs and will result in only a few projects being built. It will also result in eroded public confidence in the Government's ability to identify and act on the most vital water projects.

The other alternative is to plot a new course, one which takes the limited Federal dollars and stretches them over a larger number of projects by capitalizing on the capabilities of the project beneficiaries to assemble financing packages and at the same time weeding out the less feasible projects. We in the administration have chosen the latter path. Economically viable, environmentally sound water projects will play a vital role in our road to economic recovery in the 1980's. This administration is, therefore, deeply committed to a new partnership with the States and other non-Federal sponsors in the development of their water resources.

A major part of this commitment is asking the recipients of water project services or benefits to increase their contributions to Federal water projects costs and to assume a greater role in the planning, the construction, and the management of these Federal water projects.

Moving on to the administration position with respect to S. 1031, many have called for an administration policy on cost sharing a necessary first step in resolving the difficult issues of how to get water resources development moving again. I think, Mr. Chairman, you alluded to that in your earlier remarks.

The administration, as reflected in its fiscal 1983 and 1984 new construction starts recommendations, for example, has strongly supported moving ahead on sound water projects so long as existing and foreseeable Federal budgetary situation is realized and accommodated.

Just recently, cost sharing and financing policies for water projects not under construction were affirmed at the highest levels within the administration following a review of some 173 letters on the subject of water project cost sharing, including 35 from Governors, which we received in response to Secretary Watt's solicitation for public comment last winter. I am pleased to be able to reflect these policies in testimony regarding S. 1031 for the committee today.

Like any administration policy proposal subject to congressional action, these policies are interim ones pending continuing consultation with the Congress. I think, Mr. Chairman, again, you set the stage for that in your opening remarks today. The interim characterization of what we are talking about today is designed to emphasize the essential role of Congress in any ultimate resolution of this issue. It should emphasized, however, that all administrative actions on water projects by all water resources development agencies will be governed by those policies.

With this preface, I would like to discuss S. 1031, the bill at hand. Senator Stafford's bill, S. 1031, addresses cost sharing for the major water project purposes other than navigation. Let me say with respect to navigation, navigation cost sharing is before the Congress in other legislation which is now pending which, Mr. Chairman, I know your committee is well aware of. S. 1031, coming back to that, contains new financing and cost sharing provisions which will enable many sound projects to move ahead at minimum financial cost to the Federal Government. These arrangements address, on the one hand, the need for future water development and the particular characteristics of specific project outputs and, on the other, the limited availability of Federal funds for water resource projects.

The administration endorses S. 1031 as consistent with the policies adopted by the Cabinet Council on Natural Resources and Environment with two reservations. First, the percentages specified in S. 1031 should be viewed as minimum requirements for flood control and agricultural water supply. And I know that has been a matter particularly with respect to agriculture and concern in the Eastern States.

For example, in the case of local flood control projects where the traditional requirements of lands, easements and right of way exceed 35 percent, these traditional requirements should continue.

The second reservation is with respect to long-term cost sharing policies for flood control and irrigation which we believe must consider the ability of project sponsors to raise capital during the construction cycle. Where raising capital would place an undue burden on sponsors, then a portion of the non-Federal share could be federally financed provided, of course, that the federally financed portion is repaid with full interest. And let me say that there is no intent here to violate existing laws which will, of course, be respected.

I should also add that in the administration's view, operation, maintenance and replacement costs for the project purposes addressed by S. 1031 should be a non-Federal responsibility.

Let me move on to the rationale for increased non-Federal financial participation.

Under the historic approach to Federal water resources project development, the Federal Government is responsible for virtually all financing of project construction. In some cases repayment of the Federal costs is required, but only over a long period of time and often at inappropriately low rates of interest.

The traditional approach not only strains Federal budgetary resources, but also we believe unnecessarily subsidizes water development. In this period of large Federal budgetary deficits, the traditional approach we believe is completely inappropriate.

We need not continue these outmoded practices. Increased non-Federal financing of project development is entirely workable when an institution representing project beneficiaries assumes responsibility for financing, in whole or in part, Federal water project construction.

Increased non-Federal financing goes hand in hand with the concepts of cost recovery and user pay. It is, in a very fundamental sense, capitalizing on project benefits, the real benefits to the American economy generated by every worthwhile water resource development. We estimate these benefits in some detail in the process of project formulation and normally do not recommend construction unless, of course, these benefits exceed the cost.

Reliance on increased non-Federal financing to construct water projects recognizes that project benefits have a reality that extends beyond the benefit-cost ratio. These economic benefits, when combined with institutional arrangements to charge users for a share of the benefits they receive, provide a firm basis for new financing approaches for federally constructed water projects.

The non-Federal sector, both public and private, has used expected project benefits as a basis for project financing with proven success for years. This is most apparent in the case of the fully vendible project services such as water supply and electrical power which are extensively funded by the non-Federal sector through the sale of revenue bonds. The benefits of those projects, as reflected in the revenues that can be captured through the sale of project-provided services and capitalized bring the bond market, provide the basis for generating the funds necessary to build the projects.

However, some services provided by water projects are not vendible. The most notable of these is flood damage reduction. Because benefits cannot be withheld from beneficiaries who will not pay, flood control is not provided in the normal course of private sector activities. These benefits are, nevertheless, just as real as those of the vendible outputs and they create a firm basis for non-Federal financing when local sponsors are able to commit themselves to such instutional mechanisms as flood control districts with assessments and taxing authority to recover project costs from the beneficiaries as they receive the services provided over the life of the project.

In some areas, the States have assisted local interests in meeting this important obligation.

S. 1031, like the Department of Army's non-Federal financing objectives used to develop its fiscal year 1983 and fiscal year 1984 new construction start recommendations now pending before the Congress, reflects the essential differences in the degree of vendibility among project outputs. One hundred percent non-Federal financing is asked for hydropower and municipal and industrial water supply, 50 percent for recreation and 35 percent for flood control and irrigation. In fiscal years 1983 and 1984 new starts initiatives, the corps has required that the non-Federal share for flood control be paid in the form of construction financing, as opposed to repayment over time because of the Federal budgetary situation and because we wished to keep the ground rules simple in that our new starts initiative was to be only a short term demonstration of the workability of increased non-Federal cost sharing.

While we did not differentiate among sponsors on the basis of their particular economic and institutional situation in developing new starts, we recognize there are differences in the ability of non-Federal interests to repay their share of flood control costs, as opposed to their ability to finance these costs during the construction cycle, and accordingly, we support flexibility regarding the timing of non-Federal payment for flood control.

I wish to point out also that there is an added benefit to increased non-Federal financing and cost sharing. When non-Federal sponsors pay part of the construction costs of Federal projects, not only are there reduced demands placed on the Federal budget, there is also a powerful market test of the project's merits that substitutes for the kind of bureaucratic scrutiny that inevitably delays the implementation of productive projects and increased their financial costs.

Also, having to put up some funds on their own, local sponsors can be expected to insist on the efficient and expeditious construction of the agreed-upon project.

I also want to emphasize that cost sharing involves more than simply increasing non-Federal financial contributions. It also includes joint management, more active non-Federal participation in project decisions and greater consideration of the non-Federal concerns.

I want to point out that S. 1031 gives non-Federal sponsors time to put together their financing package as it requires only that the non-Federal share be paid "during the period of actual construction." In my view, it is entirely appropriate in cases where the non-Federal share is required to be paid during the construction period that the Federal Government finance a project for the first 1 or 2 years of construction while the local sponsor raises its share of the construction costs.

I also note that S. 1031 would require new cost-sharing arrangements before construction on any project or a separable component of a project could be initiated.

I think we all recognize that new policies have to be applied to all new project construction, including separable elements of ongoing projects as well, if there is going to be any short-run impact on spending for water projects. I certainly need not tell this committee about the long time which historically has lapsed between the project authorization and initiation of construction. While we have taken a number of steps which I believe will substantially reduce that time, we nonetheless are confronted with large Federal budget deficits this year, next year, and certainly the following year. Accordingly, if we are going to have any real impact, new financing policies must be applied to new construction starts regardless of their authorization status.

Let me move on to the subject of cost sharing for planning. Federal planning resources must be better focused on the good projects that have a chance of implimentation. For example, in the review of the approximately 500 Corps of Engineers projects feasibility reports completed over the period 1973 to 1981, we found that almost $100 million had been spent by the corps to reach a finding of nonproject feasibility for over half of those projects. Further, of those completed with a favorable benefit-cost ratio, only a handful have been authorized and funded for construction. The net result is a waste of Federal effort and dollars and a frustration on the part of those who had been led to believe that a Federal solution to their water problem was just around the corner.

In addition, those already authorized projects which are inactive number in the hundreds and studies required to deauthorize them will certainly cost several millions of dollars.

We have instructed the Corps of Engineers to break down the traditional feasibility studies into two parts—a reconnaissance study and then, if warranted, the feasibility study. The reconnaissance portion would explore possible solutions to identified problems in general terms and would be completed in a year or not to exceed 18 months and would be funded 100 percent by the Federal Government at about one-fourth or one-fifth of the cost of the present feasibility study. If the reconnaissance study demonstrates that a full feasibility study might result in a feasible project and if non-Federal interests express a desire to proceed, then a full feasibility study would be completed with the cost shared 50–50 by the Federal Government and by a non-Federal sponsor with up to one-half of the non-Federal share being supplied by in-kind services if so desired.

For example, in fiscal year 1984, the corps has budgeted some $1.6 million for the reconnaissance portion of eight new planning studies.

In addition, I am informed that the Department of Interior hopes to accelerate project development through also a new two-stage planning process for Bureau of Reclamation projects. The implementation of this process by the Bureau will give it the opportunity to respond more effectively to water problems by drastically reducing the time necessary for planning. I am sure you will hear more from the Bureau of Reclamation at some time in the future with respect to this program of cost sharing of its planning process.

These new planning approaches by the corps and the Bureau will conserve Federal dollars, will allow Federal expertise to concentrate on the really good projects which have a chance of implementation, will guarantee a local sayso on which projects will be pursued and will act as an effective screening device for projects that are not going anywhere. Despite the resistance to change, I am convinced that the new approaches will work if we will just give them a chance and I believe the impact will be remarkable.

I might add that a side benefit to cost sharing is of feasibility studies, like cost sharing for projects will be a reduction in overall costs.

In conclusion, Mr. Chairman, water problems are not going to go away. There will be a continuing demand for deep draft navigation improvements, inland waterway modernization and rehabilitation.

Continuing flood problems which we have been experiencing this year and which have been very much in evidence this last winter and spring, will keep the pressure on for new flood control projects. Additional pressure will be on for needed irrigation projects in the West, and finally development of new water supply and hydropower is an integral part of the economic growth of this country.

The key reforms are, first, redefining the financial terms on which Federal assistance will be provided to solve these problems and, two, insuring a responsive planning process through cost-shared studies of water problems. The more expeditiously a new national consensus on these issues can be developed, the more quickly we can resume the process of orderly water resource development.

This administration is committed to establishing a strong and lasting partnership with the States in water resource development. Implementing our interim cost-sharing policy guidelines for Federal water projects and expediting construction through our new planning process can only help to strengthen this partnership and, again, Mr. Chairman, we look forward very much to working very closely with the Congress, as you pointed out in your opening statement in bringing these things about.

Thank you, Mr. Chairman, I will be happy to answer any questions you may have as a result of this testimony.

Senator ABDNOR. Thank you very kindly, Mr. Secretary. That statement certainly gives us an opening to go into this subject that is so important to the future of water development in this country, something we have all been talking about but haven't been able to grasp the problem and do something about it.

You stated that the cost sharing and financing policy for water projects were affirmed at the highest levels within the administration.

Would you just elaborate on this affirmation process?

Mr. GIANELLI. Yes, the process we have used with respect to determining administration water policy is derived through the Cabinet Council on Natural Resources and Environment.

As I indicated in my statement, that Cabinet Council has held long deliberations on the subject, and, further, they were preceded by deliberations of the Assistant Secretary's working group, which was my pleasure to act as chairman, formulating these policies for recommendation to the Cabinet Council. And in all of these deliberations, all of the agencies who are concerned with Federal water development were involved.

The policy which I have enunciated today is the policy which has come out of that Cabinet Council process which has been evolved over the many months that the Cabinet Council has had it under consideration.

What we are reflecting today is the administration policy as reflected by the Cabinet Council of Natural Resources and Environment and approved at the various levels of the Office of Management and Budget.

Senator ABDNOR. Did you have a difficult time getting a meeting of the minds with these various groups?

Mr. GIANELLI. Let me say, I think on any controversial issue, Mr. Chairman, there are abound to be differing views.

I would say there was spirited debate at the various levels of consideration, but I think that is normal in the process. I think we are going to have that in any issue which is as complex as the water project issue or water resource issue concerning construction of new Federal water projects.

I view it as a healthy one. I view it as a consensus which was arrived at after much deliberation and after input from all of the agencies involved in water resource development and I am, frankly, very pleased with the outcome.

I think we have a solid statement upon which the administration can go forward and work with the Congress. As I indicated, we are looking very much to working with you committee, which is one of the committees on the Senate side for orchestrating a policy which may evolve as a result of legislation which is pending before the Congress, including certainly the subject of this hearing, S. 1031.

Senator **Abdnor**. I assure you we are more than happy to work with you. We want to proceed on this as rapidly as possible. I am curious as to what you had to go through to come to this point because we are probably going to have the same thing when we sit down with members of our committee and Members of Congress for their input.

What were some of the biggest areas of disagreement?

Mr. **Gianelli**. The biggest area, Mr. Chairman, is, certainly as you recognize from the exposure you had with the subject, that we are radically changing a pattern which has taken place over a great many years. That pattern, basically, is that the Federal Government would provide all of the financing for Federal water projects and, in addition, I think there are many project constituents who have in the past been used to the Federal Government picking up a certain percentage of the tab for water development.

I think what we are trying to do is to recognize the relationship of project benefits and relate them to project financing and take advantage of that. So I would say the biggest hurdles that you will have, I think, Mr. Chairman, and the biggest problems we have had is educating a great number of people that it is possible to move ahead in a new direction with Federal water projects, using the project beneficiaries to provide project financing.

This is a new direction that people certainly in many of the States and certainly in the Congress, have not experienced before. But my experience in my 35 years working in this area has convinced me that it can be done if people work together in good will. I am very much encouraged now, for example, as I think I have indicated in my appearances before your committee in the past, that in 1983 and 1984, the Corps of Engineers, under our direction and at the Assistant Secretary's level, contacted a number of project sponsors and asked them if they would be willing to chart this new direction for fiscal years 1983 and 1984.

We were very pleased with the response we got. We got some 14 project sponsors to indicate a willingness to work with us in new directions for Federal project financing and cost sharing, and those projects are pending before the Congress at the present time.

So that has led me to be very encouraged, and it seems to me in every forum when we can have the opportunity to explain how it can work, we have had a great reception. But I must say and I must warn you, Mr. Chairman, and, certainly the Congress, that there is opposition from people around the country who would like to have the process continue as it has in the past.

Basically, what we have said to them is, "Look"—as evidenced by the new starts over the last several years in authorizations—"the past system just is not going to work." We have had very few new projects authorized; we have had very few construction starts and unless we chart a new direction, Federal water project construction I think, is going to be in the doldrums for a very long time. We are not going to be able to take care of the Nation's needs. With the recognition that I think the Congress has of the budgetary problems, the problems we are experiencing in terms of the budget deficits, I think the Congress will be looking forward to working with the administration on getting new projects moving ahead but doing it in a way that takes some of the strain off the Federal budget.

So for these reasons, I am very encouraged. But let me say that certainly you are going to hear from special interest groups opposing what we are trying to do. You are going to hear from people who have financial problems of their own, but, again, I am confident that, working together, we can work these things out so that we are not going to jeopardize those who may have financial problems. We can work together in getting some of these new projects moving ahead under new ground rules which we are trying to set forth, as I have explained today.

Senator **Abdnor**. I am pleased to hear you say that. I would like to think that just about everyone in Congress knows that some new and different solutions are going to have to be found if we are going to proceed with water projects.

Certainly, water project construction as we know it in the past is not going to be the same for the future, and we need to get our minds together on how we are going to achieve some flexibility.

Obviously, you are coming here with an open mind on this, too, as you give us your thoughts and suggestions.

Now, we have to work it out with Congress.

How about the Governors; you say 35 Governors wrote to you?

Mr. **Gianelli**. My reading of the position of the Governors, if you bring them together, Mr. Chairman, would be that they all recognize we are going to have to move in a new direction of cost sharing for water projects.

I think they are extremely nervous about the matter of financing a portion of the cost during construction, but there, again, has been a misunderstanding in terms of what we are really trying to do.

There has been some impression that what we are suggesting in the way of financing these projects during construction by non-Federal interests means that the States themselves are going to have to fill the gap. And I want to hastily clarify that misunderstanding of what we are trying to do.

What we are trying to do is to look to the project beneficiaries and that is entirely different from looking to the States. In some cases, the States may provide and assist to the project beneficiary, particularly in areas like flood control. Certainly it is not our intention to pass the burden, for example, of financing from the Federal Government to the States. It is trying to capitalize on the benefits that will accrue to the project beneficiaries. And that is far different from passing the obligation to the States. So I would say we have an education job to do with the Governors working with the States, but, again, I think we can demonstrate that and make it clear and we are not looking to the States themselves to pick up any tab with respect to the additional financing of these projects unless they want it.

Senator **Abdnor**. I couldn't agree more. Communication, no matter what walk of life you are in, is so necessary. I guess that is why I personally felt very strongly about my water policy.

I, in all honesty, believe that had our bill been enacted 1½ years ago, we would have been way ahead of schedule today and you would have been happy with the results today.

I found out that if you don't communicate with all the people involved, all parties and sectors, you are in trouble. Sometimes there is no need for it. It is just a matter of understanding and working together. I am sure we will be doing that. I certainly feel I have to put my plug in for my old policy.

Mr. **Gianelli**. You raised this before, Senator, and it needs to be clarified. We are formulating new policy and there are projects to be caught in the transition. I think we are going to have to handle this on a case-by-case basis. In other words, I don't envision a project well underway trying to come along and change the ground rules.

What we are trying to talk about are those projects which have not been started yet. I want to make that clear because I think there has been some misunderstanding. For example, you and I had dialog on that—we are not trying to go back on commitments the Federal Government may have made or projects that are partially underway at the present time.

We have to work out those problems certainly on a case-by-case basis.

Senator **Abdnor**. In other words, you recognize whatever program we come up with, it has to have some flexibility in it for unusual situations that occur. Each of us know our own better than the other. There must be a number of water projects that this kind of a situation could arise.

How about flood control—you say it is 35 percent?

Mr. **Gianelli**. Yes.

Senator **Abdnor**. Did you say that would be all Federal money at the outset?

Mr. **Gianelli**. I said what we would try to do is get the non-Federal share during the course of the construction of the project. In the 14 projects which we put together for new starts, Corps of Engineer projects, for 1983 and 1984, quite a number of them are for flood control.

We have been working with some of the project sponsors and we think it is going to be possible during the course of the construction of those projects—it may extend over a period of time--to get, for example, those project beneficiaries to participate prior to the time the construction of the project is completed and that is our aim, is to get their participation during that period.

Senator **Abdnor**. If they are financially unable, will they have time to pay it back?

Mr. **Gianelli**. The Cabinet Council, in its last consideration of this issue, one of the things it did was to point out that if, for example, certain areas don't have the ability to pay, then we should work closely with those areas to see that they aren't being prejudiced against by virtue of that inability to pay.

I think out of this will come some future guidelines of how, for example, we can address the subject of inability to pay and how we can evaluate that.

My own feeling is, perhaps, it might be possible working with some of the financial institutions in the country to get them to help us to describe whether or not it might be possible for an entity, for example, to raise a certain amount of money on, let's say, an upfront basis.

We have to work those things out. I am confident we can still accomplish our objective.

Senator **Abdnor**. At this point in time, is there nothing definite in the minds of the Cabinet Council as to how to handle those problems?

Mr. **Gianelli**. Whether it has the inability to pay, we have to work on those. It is the intention, whenever possible, to secure a percentage of the share of financing during the course of the construction of any project.

Senator **Abdnor**. That could be a real problem.

Mr. **Gianelli**. It is going to be a problem, Mr. Chairman. It is one of the ones I indicated I believe you will hear the most about in your deliberations.

Senator **Abdnor**. What do we do with something like bank stabilization in the future? I am using that now; how are you going to assess that to the beneficiaries when they didn't have any problem until you built the dam?

How are you going to assess something like that?

Mr. **Gianelli**. I think you have got to separate, Mr. Chairman, the bank stabilization measures that are necessary as a result of construction of some kind of a project. That very well may be a mitigation cost that will have to be paid for by the project beneficiaries. But other measures of bank erosion would tie in very closely to flood control and there are districts that are organized for that particular purpose.

Senator **Abdnor**. Let's stop there for a minute. I am now convinced if you put the total cost of what we have to do in the way of water projects and water improvements, this bank stabilization could take billions of dollars, from what I am beginning to hear.

I know my own situation with the Missouri River. People were not particularly excited about having the project in the first place. They have seen the erosion take place, they are losing barns and soil every year.

We have pictures to show you. Is that the responsibility of the man who owns that land? Are we going to figure out a way to stop that?

Mr. **Gianelli**. I think you have to, again, distinguish between the erosion which may be caused as the result of somebody doing something, building, say, a major water project.

I think that is what you are alluding to. There may be a responsibility to the non-Federal project sponsors if it is not the Federal

Government. Other project users, for example, hydropower, may have to share that responsibility for mitigation.

I think what you have to do with respect to erosion is look at the cause of the erosion and figure out some way to assess the cost on a reasonable basis.

Senator **Abdnor**. Up in my State, then, can I turn to Missouri and Nebraska and say we have to make some assessment?

Mr. **Gianelli**. Mr. Chairman, I know you have some very strong views about what the Federal Government owes the people of South Dakota. I wouldn't want to get into a discussion on that.

Senator **Abdnor**. That is a good example. The beneficiaries of the project are downstream but we have to put money into fixing it. I am just following through as to what we may find ourselves confronted with on this.

Mr. **Gianelli**. We will be glad to help you address those issues, Mr. Chairman.

Senator **Abdnor**. Was there a meeting of the minds toward the end of your meetings on how to treat prior commitments, how to treat ability to pay?

Do you see some problems within your own group on this?

Mr. **Gianelli**. There may have been some questions with respect to whether or not authorized projects would be subject to the new rules. Our position is quite clear and I think the position of the administration is. Taking, again, the example of the Corps of Engineers, the corps has several hundred projects authorized but which aren't going anywhere upon which construction hasn't been started.

We feel it is going to be necessary in those projects to apply the new rules if no construction has been started. I think there are others who are concerned where there may have been some construction started that you are going to have to look at them on a case-by-case basis.

Certainly we agree with that. There is no argument in that.

Senator **Abdnor**. I guess I could go on. I have a hunch this is just the start of a lot of additional discussions we are going to be having with you and the Cabinet group. I think we have to talk about reclamation laws and the impact this is going to have on it.

I want to know your feelings and the administration's position on irrigation projects and pay back. We talk about locks and rivers, this is going to take a different approach. Actually, however we assess and try to distribute the cost, it is going to end up on the consumer.

Some of us being parochial are going to be interested in seeing who ends up actually having the cost of reasonable assessment.

Have you given much discussion to locks and things like that on the rivers, how the distribution of cost will enter in there?

Mr. **Gianelli**. I think you have to look at each project on a case-by-case basis, Mr. Chairman. I think one of the challenges that you will have and your committee will have will be balancing the interests of the various areas of the United States.

I think from my appearances before your committee before, as I think you know, Senator Moynihan has some very strong views with respect to the areas in the East. So I think one of the challenges of your committee will be to hear from all areas of the country and balance out the various interests as you see them in order to move ahead and make progress in the general area.

Senator **Abdnor**. That is right. So we have our own problems right here with our own members, our own committee, I can assure you. And you do with your own different groups and divisions and we have all got to come together on some consensus here when we are through and I hope it is not too long down the road.

The main point, is the administration willing to work with this committee to develop proper legislative language to implement a new cost-sharing policy?

Mr. **Gianelli**. An unequivocable yes, Mr. Chairman.

Senator **Abdnor**. We want to hear that. We appreciate that, if nothing else today. It makes me realize the problems we are going to undergo in the days ahead, starting with our own group here.

At least we have started a dialog today. We hope it is going to lead to great things and solving some of the water needs of this country. I am first to say it has a long way to go. We find, here in Congress, Members who are not members of this committee, get anxious and sometimes want to go around us when we don't come up with something. We feel the urgency also of getting something accomplished in the months ahead.

So I thank you, very much, all you gentlemen for being with us today. I know I am going to be seeing a lot more of you and I am looking forward to working with you.

ATCHAFALAYA BASIN, LA.

It is a real pleasure for me to have one of my former colleagues and a long-time friend from the first day I started serving in Congress with us today. Governor Treen is here to meet with the committee. Governor, we are just delighted as can be to have you. We are waiting to hear from you, unless my colleague here has a comment.

Senator **Durenberger**. Mr. Chairman, you must wonder why someone from Minnesota would show up at one of these hearings. The day after I got elected I got a beautiful letter from the senior Senator from Louisiana which traced the history of the connection between my State and the Governor's State since 1803. So I well understand some of the problems we are sending down river to the State of Louisiana and I also well understand and appreciate the difficulty of governing the State and accomplishing both State and national objectives at the same time in that process.

I think David Treen demonstrates an unusual talent for government. I am pleased he is here personally to talk about the project today, Mr. Chairman.

Senator **Abdnor**. Thank you. Governor.

STATEMENT OF HON. DAVID C. TREEN, GOVERNOR, STATE OF LOUISIANA

Governor **Treen**. Mr. Chairman, thank you very much. I appreciate your kind remarks. I do indeed remember when we came here to the Congress together in the 93d class. I hope now that you are a Senator and no longer a member of the House of Representatives that you still consider yourself to be a part of that most distinguished body, the 93d class, of which we were both members.

Senator Durenberger, thank you so much for your words of welcome and your comments. I appreciate both of you taking the time to hear me today and especially for arranging for me to be here. As I explained to you, Mr. Chairman, I have the Louisiana Legislature in session now with 2 weeks to go and lots of things coming to a head, but what I am about to talk about is of tremendous importance to the people of Louisiana, of course, but I think of great importance to this entire country. I have prepared a detailed statement, Mr. Chairman, with your permission, I would like to file that in the record and then just talk informally and from my rough notes here.

Senator ABDNOR. Without objection, I can assure you the entire statement will be made a part of the record.

Governor TREEN. Mr. Chairman, I am pleased that you have included the report that is in the Corps of Engineers process now for the Atchafalaya, the authorized portions of the Mississippi River tributaries program which relate to the Atchafalaya Basin. You, of course, are very familiar with the Mississippi River and tributaries program. It has been going on for I guess now close to 60 years. It had its origins of course in the great floods of the early 1920's and the program has been developed to contain the flood waters of the Mississippi and tributaries.

The Mississippi drains about 41 percent of the continental United States, including a good part of the States of Minnesota and South Dakota. That water comes flowing down through the Mississippi and through the State of Louisiana. The Atchafalaya Basin, which is depicted here—and I will get into what those colors mean in just a few moments—that Atchafalaya Basin is a very important part of the flood control system of the Central United States. At the Old River control structure, which this country has invested a lot of money in over the years, part of the flood waters of the Mississippi, or part of the flow of the Mississippi, I should say, is diverted down to the Atchafalaya Basin. Historians say the Atchafalaya was the old channel in the Mississippi River years ago. There is a tendency now, the scientists tell us, for the Mississippi River to change its flow back to the Atchafalaya which of course would have devastating impacts for Baton Rouge, New Orleans, and all the ports along the lower Mississippi River. Above Baton Rouge, the Atchafalaya joins, through a series of other water bodies, with the Mississippi River. The Old River control structure, takes part of the flow of the Mississippi through the Atchafalaya Basin. It can take up to 50 percent at flood stage, and we had flood stage, we had the water lapping right at the top of the levees in the last few weeks in Louisiana.

We had sandbags put on top to give us some additional protection. The flow that is normally taken is about 30 percent of the flow of the Mississippi River, a little bit more than 3 million cubic feet per second. Of the total flow about 30 percent of that taken through the Atchafalaya and the rest down the Mississippi.

The Atchafalaya Basin is then a very, very important part of flood control management of the waters that drain and run off from many, many States all the way to the Canadian border. But it is more than that. It is a magnificent river basin. I am going to be talking, Senator Abdnor, Senator Durenberger, about the lower Atchafalaya Basin.

The lower Atchafalaya is made up of bottomland, hardwood forests, cypres-tupelo swamps rich in minerals, forest products and fish and wildlife, both with a recreational value and with a commercial value.

Senator **Abdnor**. How many miles is that area?

Governor **Treen**. Air miles I imagine we would be talking, to get to the gulf, I am going to roughly estimate, probably about 60 miles or so, 50, 60 miles. I am sorry, Mr. Chairman, Kai Midboe, he is executive assistant for environmental, water, and land matters, if you go by canoe, it would take you quite a bit of time to wander down through that.

Incidentally, I would like to make a date with you to do that some time. I finally got Secretary of the Interior, Jim Watt down there, and he is very impressed, too, I might say, with that. It is a tremendous natural resource. It is, of course, of great interest to Louisianans. There is a strong national constituency for preservation of the basin. The National Wildlife Federation has been deeply interested in this for a long time. But to come to more of a recent history, in 1972, the Congress directed that a comprehensive plan for the management and preservation of the water and land resources of the lower Atchafalaya Basin be developed.

A lot of conflicting interest in there. You have communities at the lower end, including Morgan City which is right at the bottom of that map, Berwick on the other side of that river, other communities that have been built up there, largely as a result of off-shore oil and gas development, they need to have flood protection. There are also the mineral interests in the basin, agricultural interests, forestry interests, both recreational and commercial fishing interests and then, of course, the interest of a large segment of people in preserving as much of this basin as we can for public use for ourselves and for all time to come.

When I became Governor in March 1980, this conflict was still raging. Although the Congress directed in 1972 a comprehensive plan to be developed, a comprehensive plan had not been developed. There was established on the Federal level what was called an agency management group consisting of the Environmental Protection Administration, the Department of Interior together with the Louisiana Department of Public Works. When I became Governor, I appointed a five-agency task force to represent us in that management group to develop a plan.

Without going into all the tortuous details, we came up with a plan that was announced. The first plan in November 1980 and then modified in November of 1981. A plan in which the environmentalists, the mineral owners, land owners, agricuture, all people came together and compromising to a large extent their own interests to provide a comprehensive plan. Since that time, of course, there were public hearings on that, it has gone up through the channels to the district office of the Corps of Engineers and now it resides and sits on the desk of the Assistant Secretary of the Army for Public Works, Mr. Gianelli, who was here and who I have gotten to know quite well. He is very well versed in this project. As a matter of fact, he was in Louisiana recently in connection with our high flood waters and flew over some of this basin.

The corps' report calls for and you have placed that report in its present state in your bill, calls for authorization of this Atchafalaya Basin plan. There are several aspects to it. First of all, and if I can get over to the map, I think I can demonstrate a little bit better, when we talk about the lower Atchafalaya Basin, we are talking about the area below U.S. Highway 190 and then between what we call the west levee and east levee. This is the main channel of the Atchafalaya and there are many, many channels of it flowing down. The areas in blue are lands owned by the State. Either because they are water bottoms or through conventional acquisition, all the area in blue is owned by the State.

The Dow Chemical Co. donated, made a magnificent donation to the State of Louisiana of all the lands we see depicted in red. Most of that is within the basin, within these lines here. Some of it is outside the basin. They donated about 54,000 acres of which 40,000 to 45,000 acres we really haven't quite got surveyed yet, lie in this basin. Up above the map is the Old River control structure, and that takes, as I say, some of the Mississippi River flow. To orient, this is the Mississippi River here. Baton Rouge is located here, New Orleans is further down. Up above this is where the Atchafalaya and the Mississippi meet, the Red River also comes in at that point. The rivers are actually joined by a river called Old River. In any event, the water flows down through this basin control by that Old River control structure and into this area and came in very handy, I will say, as recently as a few weeks ago when we had to not only open the Bonacares Spillway down here to let some of the Mississippi go into the Pontchartrain, but we also had to maximize the flow through the Atchafalaya to keep flooding from occurring in the Mississippi River.

We had a particularly dangerous spot at Louisiana State Penitentiary above Baton Rouge where the water was literally 2 inches below the top of the levee, so it was really touch and go.

As part of the plan, there would be some acquisition for public use of certain areas. The areas we have identified we would like to acquire for public use are the areas in yellow.

The basic elements of the overall plan are an easement that would provide for flooding the entire basin, when necessary, a flowage easement, but added to that is an element that we referred to as nondevelopment, meaning no industrial, commercial, habitational type development anywhere in this basin.

That would presumably cost something more than simply an easement to flood the area. One of the principal reasons why we think that is important is because if you don't have, if you have simply a flood easement and you don't have an easement that prohibits that type of development, then you are going to get resistance. If development occurs, just as in Missouri in the New Madrid area, there was great resistance to the utilization of a flood basin if you allowed development.

Constituents would come to Congress and want to be compensated for the damage and everything else. We think it is extremely important, that easement that has been designated, as an amount of easement for the entire Atchafalaya with a flood easment and nondevelopment easement.

And then in addition to that, taken advantage of this opportunity to provide a tremendous recreational wildlife area, which, if all of these things are joined together, the land already owned by the State, the Dow donation, which is complete, we have that, plus access, we would preserve about 40 percent, maybe as much as 44 percent of the entire Atchafalaya Basin for public use, recreational use. The State of Louisiana is willing to participate, as I have already said, in that land acquisition aspect.

As a matter of fact, the land owners on a willing vendors' basis, not on expropriation basis, we have been negotiating with the landowners for some time. They indicated as part of this plan, they would be willing to sell up to 55,000 maybe as much as 58,000 acres on a willing vendor, willing purchaser basis.

In order to keep this thing on track and realizing how slowly it moves through the Congress and of course through the bureaucracy before it gets to the Congress, we have been negotiating with the land owners and 2 weeks ago I recommended to the legislature that we use some of our conservation funds, as much as $12 million for the first acquisition of land right in this area here. The House has approved it, it is now before the Senate. I think it is going to go through.

I emphasize that because the State of Louisiana is willing to play a role in that acquisition. We do believe that the overall easement should be a Federal responsibility except for, or course, the historical provisions that the State makes.

This is not a local project. It is a flood control project that involves, as I say, waters from 41 percent of the United States and I know, Mr. Chairman, you probably want to get into that because that is what this hearing is all about, cost sharing.

I will make my point in response to the questions I am sure you will have. Certainly on the recreational aspects, it will be open to the public from wherever, not just Louisiana. But we do see that there is certain justification for having local government participate in the acquisition of the recreational area.

The flood control is something else entirely different. So we hope, Mr. Chairman, that this particular project will stay in your bill and that it will receive the blessing of this subcommittee and the full committee and that you will report it to the Congress.

I hope that the administration, and I have been in communication with a number of the members of the administration, I hope they will give their blessing to this particular project.

Let me see if I have any other notes. If I can, in the report of February 28, 1983, the report from the Secretary of the Army, it provides for "public assess—participation with the State of Louisiana in fee title purchase, excluding minerals, of approximately 50,000 acres of lands identified by the State agriculture being available from 'willing vendors'."

The yellow areas have been identified as available. "Federal cost participation would be limited to $32 million." I think that is now up to approximately $34 million.

The report goes on, "The State will provide additional public access within the lower floodway on 150,000 acres of State-owned land"—the blue areas—"and on more than 30,000 acres"—it is more than that now—"30,000 acres of lands donated to the State by the Dow Chemical Co."

In addition to participating on a cost-share basis in the acquisition of these areas, we, of course, would provide the flowage easements, nondevelopment easement on all the lands the State owns and all the lands the State has now acquired from the Dow Chemical Co. which will be a significant contribution by local interests.

Senator **Abdnor**. Thank you, Governor.

That is a fine statement. You certainly are using a great deal of State initiative here. I am sure that must make all groups you are working with from the Federal level on down pleased.

You arrived just as Assistant Secretary Gianelli was completing his testimony on cost sharing. He is speaking, I guess, for the administration and the cabinet level group. He suggested cost sharing for non-Federal groups, on the order of 35 percent for flood control and 50 percent for recreation.

This is not to say we have accepted this. This is a starting point. Perhaps you heard about the entire plan.

Apparently they had 35 Governors write to them on this.

Governor **Treen**. I did not hear the last one.

Senator **Abdnor**. Thirty five governors wrote to Secretary Gianelli and the Cabinet Council expressing their views.

I would like to hear your views on cost sharing. You obviously are trying to make quite a contribution with this particular project.

Governor **Treen**. I appreciate that opportunity to express myself on it. I think 35 percent to local and 65 percent Federal doesn't take into account water resource management has a lot of different elements. I don't think you can come up with just the one formula. I think it depends on the national implications, to a large extent, the benefits—incidentally, this particular project has an 18.7 to 1 benefit ratio, which I think is pretty good.

So you might want to move that to the top of your list in the bill, if you rank them on that basis. I think to a certain extent you have to look at whether the benefits are that in scope or the problem has national implications that you are attempting to solve and come up with different formulas based upon the peculiar elements of any particular plan.

To that extent, I have to disagree with my administration that just to take a flat 35–65 is the wrong way to approach. I guess you have to start somewhere, put something out on the table. I know this sounds parochial but I think this is definitely the kind of project, after all, we are having a tremendous additional flow of water precisely because of flood control projects, whether they be local or Corps of Engineer projects, whatever, all the way up to the Mississippi Basin and the basin of all the rivers that flow into the Mississippi.

That is why we have so much of this water. I don't think it is right to suggest that Louisiana come up with 35 percent at all.

We, of course, share some costs now with respect to right of ways.

I would like to point out something else, too, I think this is a pretty good example of why you need to look at various aspects.

One of the reasons that we have a great need for this flood control in here is something I alluded to. In our coastal area, we have built up a good deal of commercial and industrial facilities and communities, residential communities, because of the offshore oil and gas development, which is mostly, of course, offshore in the Federal area, some, I guess, seven, with that recent lease sale, we are somewhere close to $10 billion of income to the Federal Government as a result of oil and gas production off our coast. And these people have to live and work in these coastal areas to service that. That is why we had a population explosion in the low lying areas along the coast of Louisiana.

We have done that, I will say, willingly because it has a good economic impact for our State and we also are interested in energy sufficiency for our country, but it is not without cost. Even though we think the country should move in that direction, it is not without cost to us.

I don't want to digress too much, pipelines, channels, everything else on your coastline are laced with it, have had some environmental impact and harm to our coast. So we are saying that one of the needs for this flood protection is because we have put the people and the facilities in this zone for a national purpose, development of oil and gas reserves and the production of minerals in the Federal domain. So Morgan City is the city that has been a pioneer in that, the first Federal offshore well was off the coast of Morgan City in 1946. That is another reason.

Incidentally, the pipelines for the strategic petroleum reserve, another Federal program, cut across the basin. This is a port at St. James on the Mississippi River which is a deep sea port and then the oil would be transferred to the west of this area and that goes straight across the Atchafalaya Basin.

We are providing a transit area, if you will, for a very important Federal function, the strategic petroleum reserve.

If you have another question, I promise to make my answer shorter.

Senator **Abdnor**. That is fine. If it takes a little longer to get your story told, we will lasten. It is a subject matter we are dealing with. I was just looking at your project. The suggestion was 50-percent cost sharing on the part of recreation and 35-percent flood.

The area that benefits from this project of flooding covers the vast area.

Governor **Treen**. Yes, and that would be the larger cost of this, Mr. Chairman, the so-called A-7's meant, asserted to, the right to flood the area and the prohibition against the development, except now mineral production could be carried on under whatever requirements of section 404 for permitting, and, of course, there would be fisheries and that sort of resource utilization, but there would not be any communities built up, any businesses, anything like that.

As I say, that is important from the Federal standpoint because the pressure is going to be on you if you ever have to flood that area is to compensate these people. The pressure is going to be there.

Senator **Abdnor**. If you make all that area noncommercial, you will not have added revenues coming in through industry or business. You are apparently doing it for the good of the community and the area. Are you going to leave it in its natural state without any kind of development?

Governor **Treen**. Except that mineral production, control under existing laws having to do with wetlands would be controlled. I think that is in the national interest to permit mineral production.

Senator **Abdnor**. Over a period of years, how regular do you have a flooding situation?

Governor **Treen**. Of course it varies, sometimes it is very extensive flooding. In 1973, I say that is the last really major flood we had in the area. We had to rush in and build up the sea wall in Morgan City, Berwick, a lot of emergency measures by the Corps of Engineers.

The entire flood control project here was halted when the EPA was passed back in 1971, 1972; 1969 Environmental Protection Administration. This project the Corps of Engineers was directed to stop until they get their EIS.

As a result of that, Congress said, let's get a comprehensive plan for this basin, let's look at all the uses of the basin and come up with a comprehensive plan. That was in 1972. We now have that comprehensive plan here in the year 1981. We had severe flooding in this area in 1973. It was contained in the basin but the basin was pretty well flooded. We had high waters last year and the year before but not extensive over the whole area.

The uses we would have would be news that would be compatable with the need to flood the entire basin. The fishermen and trappist can get out, the oil and gas people if there is some activity, they can get out, just as they get out when there is a hurricane coming.

Senator **Abdnor**. Senator Durenberger?

Senator **Durenberger**. Thank you, Mr. Chairman.

Governor, thank you for your statement. On the whole issue of cost sharing, obviously this is one of those areas in which, in principle, we can all agree it is a good notion, in practical application it becomes terribly difficult and the chairman of this subcommittee has been right in the middle of the problem all the way along. I was just running through Mr. Gianelli's statement.

As you know, and the chairman of the subcommittee knows, since we are at opposite ends of the Nation and opposite ends of this river, we talk about cost sharing and utilization of the river, and we are going to treat the sugarcane farmer who ships 100 miles on the Mississippi the same as the wheat farmer in North or South Dakota, who ships 1,000 miles and on its face, that is ridiculous to anybody who knows about the economics of this waterway. For the same reason it strikes me that adopting any kind of a flat out notion that says everybody is going to pay 35 percent of flood control and 50 percent of its recreation defies some of the laws of reality.

The concern you have here and we should all share with you, of course, is this is part of a national recreation facility, it is an economic facility. It is many things—the Mississippi River and to a degree we in the States influence what that river does to us by our land use policy, but those land use policies have been built up in a time when the consequences are paid for by the Federal Government.

Now, if all of a sudden, the notion we should come back to the Minnesotas, South Dakotas, Louisianas to pick up a tab, I am afraid it is going to slow down projects like yours and projects I have in my own State which are smaller in nature, but we spend too much time debating some kind of a flat rate cost-sharing proposal, we are just adding to the cost of doing something about this. You will be back here 4 years from now and you will be talking about 30 to 1 benefits because you will have a couple more floods which will demonstrate, in a damage situation, what the benefit of doing this is.

So I think all of us are deeply concerned about how we come to grips with this cost-sharing issue and none of us, it seems to me, object to it in a matter of principle.

I take it that is where you stand but we ought to try to treat each of these projects on its own merits and somewhat differently from a national formula.

Governor **Treen**. Yes, sir, I do, and I don't have any guidelines to throw out on the table. I just wanted to talk about it conceptually. I would be given time, be delighted to throw out some ideas.

Senator **Abdnor**. We would be happy to hear from you.

Governor **Treen**. And to add that to the statement at some time. Certainly I have no expertise in this area at all. I served on the Public Works Committee in the House. I do as a matter of concept, Senator, if I read your remarks correctly, you have got to look—you have to have differentiation with respect to water projects to come up with some ideas.

I don't know whether it could be done on a case-by-case basis. Certainly, if Congress had to decide cost-sharing on a case-by-case basis, I guess you would get nothing else done here. Maybe some flexibility in the hands of responsible people such as this subcommittee would be great.

Senator **Durenberger**. Some members of this full committee have a notion we ought to block part of this money and ought to get out of the business, just send block grants back to the States and let them deal with some of these problems.

This would probably not fall in that category since it is so directly related to a national resource. That would sure speed things.

Governor **Treen**. We have moved ahead, as I say. We have our fiscal problems in Louisiana just like every State in the Union, but I have recommended the utilization, as I say, $12 million to keep the dialog going and negotiations with the land owners, and they have indicated 3 years, up to 3 years. So, hopefully, by the time we get to the next slice, we would have participation on that aspect of it.

Senator **Abdnor**. Governor, will you ask your assistant to give his name?

Mr. **Midboe**. Kai Midboe.

Senator **Abdnor**. Governer, we certainly appreciate your coming here and explaining your project and giving us your views on this problem of cost sharing.

I would very much like to see that project someday.

Governor **Treen**. We would like to have you down, Mr. Chairman.

I have given you the book on the Atchafalaya. I supplemented that with some additional material. That is the same map in a picture with President Reagan. He is acquainted with this project.

As I say, Jim Watt, I don't want to put him on the spot, but I think it is a fact he showed a great deal of interest in it when he toured the basin about a year ago. I think we have some friends on this particular project. This might be a case where we can really demonstrate that we have got to have some flexibility with respect to the cost-sharing process.

Senator **Abdnor**. It lends a great deal to our discussions.

We appreciate it very much. It is a pleasure having you back with us.

The committee will adjourn.

[Whereupon, at 11:41 a.m., the subcommittee recessed, to reconvene at the call of the Chair.]

[Statements relating to S. 1031, the bill, S. 1031, and Governor Treen's prepared statement follows:]

STATEMENT OF

WARREN R. NEUFELD
SECRETARY

DEPARTMENT OF WATER AND NATURAL RESOURCES
STATE OF SOUTH DAKOTA

ON S. 1031
WATER RESOURCES POLICY ACT OF 1983

BEFORE THE
SUBCOMMITTEE ON WATER RESOURCES
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
UNITED STATE SENATE

MAY 17, 1983

Mr. Chairman and members of the Subcommittee, my name is Warren R. (Bob) Neufeld, Secretary of the South Dakota Department of Water and Natural Resources. I would like to thank the Subcommittee for this opportunity to comment on the critical issue of national water resources development and cost sharing policy. In South Dakota, water development is economic development and we are anxious to move forward with our priority water projects. Without a clear national water resources policy, however, it will be extremely difficult to accomplish our objectives.

South Dakota is willing to accept greater responsiblity for water project development and financing. This includes sharing in the costs and work associated with project feasibility studies. Prior to accepting such responsiblity, however, South Dakota must be assured that state concerns will be properly included in water project development efforts and that such development can be expedited. The state has no interest in sharing the costs for project development if the federal agencies involved refuse to accept state recommendations and if it continues to take 20 years to see a project developed. Any new cost sharing policy has only limited value if funding is not available and if we are unable to accomplish water development objectives in a timely manner.

We may take exception to any new cost sharing policy that does not apply to currently authorized projects. A retroactive project exemption to any new cost sharing requirement has no value in determining the real need for the hundreds of projects at a cost of billions of dollars that are currently authorized for development. Cost sharing should assist in determining and expediting water project priorities. Deleting all currently authorized projects from any new cost sharing policy will only hinder the national economic growth objectives which should be paramount.

South Dakota suggests that cost sharing policy should reflect the ability of individual states to provide financing in conjunction with their commitment to project development. Thus, some weight should be given to the financial capability of each state as determined by per capita income over a given period of time. A sliding scale could be developed where the more capable states would meet in full any specified non-federal financing requirements, and less capable states could fulfill a financing requirement adjusted downward to some reasonable level. This is particularily important to a relatively poor state like South Dakota. Also, non-federal interests should receive an appropriate percentage of project revenues commensurate with the extent of financial responsibility accepted by the non-federal interest for project development.

We also suggest consideration of a two track system for water project cost sharing. Under this system, a basic level of federal funding would be provided annually for small scale ($50 million or less) water projects. Funds would be automatically allocated to the states based on a formula that gives equal consideration to state land area and state population although no state shall receive less than a specified minimum or more than a predetermined maximum amount of funds under the allocation formula. This program would provide for consistency in planning, expedite development, and allow the states to determine their own priorities.

The second part of this two track system would apply to large scale projects and would utilize the current Congressional authorization and appropriation process.

This system recognizes the reality of how major projects are funded in a competitive political environment. Non-federal financing requirements would be adjusted for large projects based on the per capita sliding scale approach to determining state financial capability.

The two track system would alleviate much of the currently authorized project backlog problem, and would still allow Congress and the Administration to determine where major water project investments should be made.

Consistency and uniformity may be desirable ingredients in any new cost sharing policy, but not at the total exclusion of flexibility. Special factors may deserve consideration in the allocation of federal funds for water projects or in the cost sharing requirements associated with water project development. South Dakota, for example, has lost over 500,000 acres of land in conjunction with the Pick-Sloan program and the construction of the Missouri River mainstem dam system which provides downstream Missouri River states with flood control and navigation benefits. South Dakota, however, has yet to receive the federal assistance for irrigation development provided by the Pick-Sloan program. The Reagan Administration has rightfully recognized the long outstanding federal debt to the state, and factors such as this must be included in any new water project cost sharing policy.

South Dakota supports the general concept that project costs should be recovered from identifiable beneficiaries to the maximum extent possible. This principle should be applied to all project functions including irrigation, flood control, and navigation projects. At the same time, there is a definite federal financial responsibility to support certain projects of national interest where full costs cannot practicably be recovered from the identified beneficiaries or where special state factors must merit consideration.

Considering the federal financing system which currently exists, South Dakota does not see the need for also establishing federal capital revolving funds or infrastructure banks to help finance revenue supported water projects such as municipal sewer and water service. Congress has already determined the major areas of federal interest and has established several federal programs to assist in funding identified priorities such as urban development, environmental protection, rural development, water development, and economic development. Under the Reagan Administration's proposed block grant approach, enough flexibility is provided to allow these funds to be used for basic state and community needs. It would be more appropriate and responsible for each state to establish its own water development fund to match federal investment programs than to establish some new federal financing mechanism. South Dakota has no interest in becoming involved with a federal develoment bank and having to justify our projects in comparison to water projects in other states to obtain federal infrastructure loans. The priority water projects in South Dakota are critical to our state's development regardless of how they fare in comparison to relatively wealthy states such as California, Texas, and New York. We should not be denied access to financial assistance from some new federal financing bank simply because other states can show a proportionally greater benefit.

The establishment of a new federal financing entity would do little to solve the fundamental issue of water development, i.e., the inability or unwillingness of state and local governments to provide needed services. A federal bonding authority may only add to the problem of the growing federal bureaucracy and federal budget deficit while dilutng state control over water development instead of increasing state control over water project decisions.

Conclusion

South Dakota looks forward to working with the Congress and the Reagan Administration on the development of national water project cost sharing policy. Such a policy must assist in securing and expediting water project development. It should provide both consistency and sufficient flexibility to take into account special factors presented by the states. South Dakota is willing to accept greater project responsibility if this includes greater state control over project development. In lieu of any new and formal cost sharing policy, which will take considerable time to develop, South Dakota would support implementation of revised cost sharing requirements on a case-by-case basis. It is imperative to move ahead with water project development as part of a national economic revitilization effort even if such project development proceeds on a selective basis and new cost sharing arrangements are agreed on separately for each project by the involved federal and non-federal project sponsors.

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NATIONAL SOCIETY OF PROFESSIONAL ENGINEERS

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TESTIMONY SUBMITTED BY THE

NATIONAL SOCIETY OF PROFESSIONAL ENGINEERS

ON

S.1031, THE WATER RESOURCES POLICY ACT OF 1983

TO THE

SUBCOMMITTEE ON WATER RESOURCES

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

UNITES STATES SENATE

May 31, 1983

The National Society of Professional Engineers is pleased to submit comments on the Water Resources Policy Act of 1983, (S.1031). Our Society was founded in 1934 as an organization dedicated to advancing the social and professional environment of the engineering profession, and to serve the public welfare by offering engineering viewpoints on matters of public policy in which engineering background and expertise are pertinent. The Society is composed of 80,000 members engaged in virtually every aspect of engineering practice and has affiliated state societies with similar purpose in every state and more than 500 local chapters.

As the national association representing the professionals who design, and in many cases oversee the construction and maintenance of our nation's water infrastructure projects, NSPE is deeply concerned over the need to develop a coherent set of national policies regarding water. Cost sharing between the Federal and state and local governments is an important issue which must be addressed in that context. The comments we are submitting today are consistent with the "NSPE Position on Water Policy," as approved by our Board of Directors in January 1981 and amended in July 1982 and January 1983. A copy of this document is attached as an addendum to our statement.

We support the general notion of cost sharing, and we have been encouraging the Administration to proceed with a formal cost sharing program. Therefore, we applaud Chairman Stafford's efforts to move this process along by introducing S.1031.

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AN EQUAL OPPORTUNITY EMPLOYER

There are a number of general principles which we believe are important in the development of a national cost sharing policy for water.

First, project beneficiaries and problem contributors, where they can be identified, should pay a share of initial project costs or provide the Federal Government with a firm commitment to repay their share of project costs with interest in order to qualifty for Federal funding.

Second, we believe that all Federal agencies should adopt and enforce the same cost sharing rules for like projects. Federal cost sharing policies should, to the extent possible, have a neutral effect on the comparison of alternative management solutions.

Third, states desiring Federal funding assistance should be encouraged to adopt cost sharing policies that are compatible with Federal policies and which are consistent when applied to similar projects.

Fourth, Federal capital expenditures for hydropower and municipal and industrial water supply should be fully recovered. Repayment should begin as soon as the project is completed and water is available.

Finally, cost recovery policy for navigation and irrigation projects should recognize the historic public commitment to support these activities through seeking phased reimbursement of operating and maintenance costs first, and full cost reimbursement as a long term objective.

The Water Resources Policy Act of 1983 incorporates many of these points. We wholeheartedly endorse the provisions requring full recovery of capital costs for hydropower and municipal and industrial water. The Federal Government should not subsidize projects which provide vendible products for which costs can be readily allocated.

We also believe that the relatively low non-Federal cost sharing burden for agricultural water and flood control is appropriate, given traditional Federal support for such projects and, in the case of flood control, the relatively diffuse nature of the benefits produced.

Regarding recreation projects, we believe that the 50 percent Federal share provided in the bill is too high. Given the severe fiscal problems facing the Federal Government, and given the large backlog of projects geared to meeting more basic needs, a smaller Federal contribution for recreation projects should be considered.

The allowance of in kind payments by beneficiaries for a large portion of project costs, as provided under Section 3(b), would improve the Secretary's ability to tailor the cost sharing policy to fit state and local resources, and we support that aspect of Section 3(b).

We do have an important reservation regarding S.1031, however. Our major criticism is closely tied to a general concern we have over our national water programs. The bill only deals with one of the several Federal agencies which have jurisdiction over water projects. The

National Society of Professional Engineers advocates reform of Federal water resources development programs through the implementation of a national policy providing for coordination and a greater level of uniformity among these programs. This is especially important in the area of cost sharing. The Federal contribution under the Army Corps of Engineers should not differ from the Federal contribution for a similar project under another agency. Federal subsidy levels should be based on the priorities placed on the various types of projects and on the ability to clearly identify project beneficiaries, and should not depend on the administering agency.

We realize that expanding the scope of the bill would bring other congressional committees into the debate. However, a truly effective policy must encompass more than just one agency.

Despite these concerns over the scope of S.1031, we appreciate the subcommittee's work to promote cost sharing for Federal water projects, and the membership and staff of the National Society of Professional Engineers will be happy to assist the subcommittee in this effort.

II

98TH CONGRESS
1ST SESSION

S. 1031

To authorize an equitable sharing of costs on projects of the United States Army Corps of Engineers in order to encourage a more orderly development of the Nation's water resources.

IN THE SENATE OF THE UNITED STATES

APRIL 12, 1983

Mr. STAFFORD introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works

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A BILL

To authorize an equitable sharing of costs on projects of the United States Army Corps of Engineers in order to encourage a more orderly development of the Nation's water resources.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may be cited as the "Water Resources Policy Act of 1983".

SEC. 2. After the date of enactment of this Act, the Secretary of the Army, acting through the Chief of Engineers, shall not initiate construction on any project, or separable component of a project, until a non-Federal public interest agrees to provide, during the period of construction of the project or component, the following percentages of the cost, depending on the purpose of the project or component:

(a) Flood control: 35 per centum;

(b) Hydroelectric power: 100 per centum;

(c) Municipal and industrial water: 100 per centum;

(d) Recreation: 50 per centum;

(e) Agricultural water: 35 per centum, and

(f) Beach Erosion Control: Initial Construction and Periodic Nourishment: 50 per centum.

SEC. 3. (a) No project or component of a project constructed under the terms of this Act shall be initiated by the Secretary until the Secretary agrees in writing with a non-Federal public interest to the cost-sharing arrangement described under the terms of section 2 of this Act.

(b) The Secretary is authorized to accept payments in kind toward the non-Federal share of the cost of any project or component of a project under the terms of the Act, provided that at least 10 per centum of the costs are provided in cash during the period of project construction. At the request of the appropriate non-Federal public interest, the Secretary may delay, for up to one year after the date when construction is initiated on a project or component of a project, the initial payment to be made by the non-Federal public interest under the terms of this Act.

State of Louisiana
OFFICE OF THE GOVERNOR
Baton Rouge
342-7015

DAVID C. TREEN
GOVERNOR

STATEMENT OF GOVERNOR DAVID C. TREEN

Subcommittee on Water Resources

Committee on Environment and Public Works

June 15, 1983

The future of the Atchafalaya Basin in the State of Louisiana is of great importance to all the citizens of the United States. The basin is one of the few remaining semi-wilderness areas left in the United States, consisting of 593,000 acres of bottomland hardwood forests, cypress-tupelo swamps, marshes and bayous of enormous productivity and significant beauty. The Atchafalaya Basin also serves as a natural flood plain and a man-made floodway that protects the lives of hundreds of thousands of people and approximately $10 billion dollars of private investment in the Lower Mississippi Valley.

In addition to being one of the nation's truly unique natural heritages, the Atchafalaya Basin is also enormously productive. There are presently 107 active mineral leases in the basin with 992 producing oil and gas wells. The basin is rich in timber producing over $6,800,000 worth of forestry products in 1978. The Atchafalaya Basin contributes significantly to the state's reputation as the "Sportsmen's Paradise" by providing an estimated (in 1977) yearly recreational value (sports fishing, hunting and other recreational uses) of $51,600,000. The basin's vast assortment of fish and wildlife make the area a vital resource to commercial fishermen, trappers and hunters. It is estimated that in excess of $8,000,000 worth of crawfish and $2,000,000 worth of commercial fin-fish are taken from the Atchafalaya Basin yearly.

HISTORY OF THE ATCHAFALAYA BASIN PROJECT

In 1927, a devastating flood struck the lower Mississippi River Valley, including the Atchafalaya Basin. The flood ravaged some 16,500,000 acres in seven states. Although property damages totaled nearly $1 billion in today's dollars, the greatest loss was the 214 persons who perished. Congress responded to the flood's devastation with passage of the Flood Control Act of 1928. The Act authorized the comprehensive Mississippi River and Tributaries (MR&T) flood control project. In the Atchafalaya Basin, the MR&T project includes three floodways--Morganza, West Atchafalaya and Lower Atchafalaya Basin. These floodways are designed to carry half of the project flood--one even greater than the flood of 1927--to the

Gulf of Mexico. This relieves the Mississippi River of carrying the full burden of flood control. A variety of other measures was undertaken to make the Atchafalaya Basin an efficient floodway: a single channel was dredged through the basin above Grand Lake, levees were straightened and extended, and a new outlet (Wax Lake Outlet) was created between lower Grand Lake and the Gulf of Mexico.

To prevent the Mississippi River from diverting to the shorter Atchafalaya River route to the Gulf of Mexico, the Old River Control Structure was built. This structure is operated to regulate flows between the Mississippi and Atchafalaya Rivers.

In the late 1960's concern grew that the Atchafalaya Basin floodway would not be able to carry a project flood. In 1968, the U. S. Senate Committee on Public Works directed the Corps of Engineers (COE) to review the flood control requirements of the Mississippi River alluvial valley, including "a plan of improvement for the control of Old and Atchafalaya Rivers, to determine whether, in light of changed conditions, any modifications, extensions, or additions to the existing Old River control system or its operation are warranted at this time."

The conservation community, led by the National Wildlife Federation (NWF), became very concerned that the COE activities in the floodway, particularly plans to increase the flood carrying capacity of the main Atchafalaya River channel, would have an unnecessarily severe adverse impact on the natural environment of the basin. Since the basin project would have to comply with the requirements of the newly enacted National Environmental Policy Act of 1969 (NEPA), it was agreed by the COE and the NWF that no new activities concerning main channel improvements would be undertaken until the NEPA Environmental Impact Statement (EIS) was completed. The NWF also agreed it would not object to any other aspects of the project while the EIS was being prepared. As a result of this agreement no work has been undertaken on the main channel of the Atchafalaya River since 1970.

To facilitate an interdisciplinary approach to developing the EIS, the COE established a Steering Group composed of the NWF, the Louisiana Department of Public Works, the Louisiana Wildlife and Fisheries Commission, the U. S. Department of Interior, the U. S. Environmental Protection Agency and the Louisiana State University School of Environmental Design.

Concern, however, continued to grow that a truly multi-purpose study was needed to determine the future uses of the Atchafalaya Basin. In 1972, the U. S. Senate and House Committees on Public Works adopted identical resolutions directing the COE to develop "a comprehensive plan for the management and preservation of the water and related land resources of the Atchafalaya Basin, Louisiana, which would include provisions for reductions of siltation; improvements of water quality; and possible improvements of the area for commercial and sport fishing." To assist the COE in carrying out this multi-purpose study, an Agency Management Group (AMG) was formed composed of the U. S. Department of Interior, the U. S. Environmental Protection Agency and the Louisiana Office of Public Works. This multi-purpose study was to be developed in conjunction with, but separate from, the 1970 EIS on the main channel of the river.

In 1976, a draft EIS was completed for the main channel of the Atchafalaya River and forwarded to the Chief of Engineers. However, the draft EIS was not released for interagency coordination or public review because of concerns expressed by other agencies and environmental groups that construction of the main channel project would be resuming before the multi-purpose project for the floodway was completed. The Chief of Engineers combined the two studies and directed the New Orleans District of the COE to develop a multi-purpose General Design Memorandum (GDM) for the overall Atchafalaya Basin. The 1970 Steering Group became inactive and work on the GDM was coordinated through the Agency Management Group.

In 1979, the COE began a series of public meetings on a Tentatively Selected Plan (TSP) for the Atchafalaya Basin which had been developed by the AMG. The TSP includes:

(1) Operating procedures for the Old River Control Structure;

(2) Enlargement of the main flood control channel;

(3) Sediment control features;

(4) Management units to attempt to restore the historical hydrologic conditions;

(5) A real estate plan;

(6) Features for distributing flows through the Lower Atchafalaya River and Wax Lake Outlet;

(7) Plans to reduce backwater flooding problems for the Lower Atchafalaya River in the area East of Morgan City, Louisiana; and

(8) Management entities to implement any plans resulting from this study.

ROLE OF GOVERNOR TREEN IN PLAN DEVELOPMENT

Previous administrations in the State of Louisiana had been very reluctant to become involved in the highly controversial and emotionally charged Atchafalaya Basin issue. I, however, was determined that the state would take a leadership role in developing any plan that affected land in Louisiana to insure that Louisiana interests, be they state or local, public or private, were represented to the maximum extent possible. Otherwise, the final plan would largely have been the product of federal entities - which included a recommendation for federal acquisition of all private lands in the Atchafalaya Basin.

To achieve a viable balance among the diverse and sometimes conflicting interests in the Atchafalaya Basin would not be easy, and would involve a great deal of political liability. To insure that the full range of Louisiana interests was represented in drafting a land use proposal for the basin, I established a State Agency Work Group (SAWG) composed of the Department of Natural Resources, the Department of Wildlife and Fisheries, the Department of Culture, Recreation and Tourism and the Office of Public Works.

The land use proposal developed by the SAWG was released on November 5, 1980, and received widespread support. It was formally adopted by the AMG as the recommended land use proposal for the Tentatively Selected Plan.

When I announced the Louisiana Land Use Proposal I made it clear that I remained willing to review any other proposals for resolving the Atchafalaya Basin controversy. My only requirement was that they treated all competing interests in the basin in a fair and honest manner. Several concerns were raised with regard to the Louisiana Land Use Proposal. The hunting clubs in the basin were concerned that the recommended "greenbelts" would adversely impact their clubs. While pleased with the land use proposal, the conservation community believed that fee simple ownership of certain tracts of land would be better for conservation management than the recommended series of easements. All agreed it would be difficult to obtain the 100% federal financing for the project contained in the MR&T project.

On November 19, 1981, I announced a modified version of the earlier Louisiana Land Use Proposal. Work on this proposal had been going on for about a year, and was made possible by the generous donation by the Dow Chemical Company of in excess of 54,000 acres of land in and around the Atchafalaya Basin.

This modified plan involved:

1.) The Dow Chemical Company donation of in excess of 54,000 acres of land in and around the Atchafalaya Basin;

2.) The state, conservationists and landowners agreeing to support tightened non-conversion language in the A-7 easement.

3). The Atchafalaya Basin landowners agreeing to sell in excess of 48,000 acres of land to the state on a "willing vendor" basis; and

4). The state voluntarily agreeing to share the costs with the federal government of buying the land from "willing vendors."

This multi-purpose plan fully responds to the 1968 and 1972 Congressional resolutions concerning the Atchafalaya Basin. It is a multi-purpose plan that insures that the basic flood control needs of the Lower Mississippi Valley are met, the unique environmental features of the basin are maintained, the rich and productive fish and game habitat is preserved, future mineral and timber production will not be hindered, public accessibility and recreational opportunities are fully maximized and the fundamental rights of private property ownership are not unnecessarily or unfairly abridged.

The key elements of the proposals are: it is truly a multi-purpose plan; it arose out of state initiative; it involves an outstanding example of corporate citizenship on behalf of the Dow Chemical Company; it does not involve the expropriation of private lands but relies on the purchase of land (much of it wetlands) only from "willing vendors"; it involves a voluntary agreement by the state to share the costs of an otherwise federally funded project; and, very importantly, the proposal has the overwhelming endorsement of the landowners, mineral and forestry industries, fishermen and hunters, wildlife enthusiasts and naturalists, and the environmental community.

CURRENT STATUS

The Tentatively Selected Plan (TSP) for the Atchafalaya Basin has been approved by the New Orleans District of the Corps of Engineers and the Mississippi River Commission. The TSP has been incorporated by the Chief of Engineers, Lt. General J. K. Bratton, in his Report "Atchafalaya Basin Floodway System, Louisiana" dated February 28, 1983.

With regard to the real estate and environmental elements (unauthorized features) of the Atchafalaya Basin plan, the Report of February 28, 1983 provides:

> "Unauthorized features of the plan recommended by the reporting officer are in the public interest, are justifiable on the basis of combined economic and beneficial environmental effects, are responsive to the Congressional resolutions which requested a ... comprehensive plan for the management and preservation of the water and related land resources of the Atchafalaya River Basin ... and are, therefore, proper added increments of the Mississippi River and Tributaries Project."

The report specifically provides for:

> "Public Access - Participation with the State of Louisiana in fee title purchase, excluding minerals, of approximately 50,000 acres of lands identified by the State as being available from "willing vendors." Federal cost participation will be limited to $32,000,000.00 (The State will provide additional public access within the lower floodway on 150,000 acres of State-owned lands and on more than 30,000 acres of lands donated to the State by the Dow Chemical Company.)"

The report also provides for "flowage easements on approximately 59,000 acres and developmental control easements on approximately 367,000 acres, excluding developed ridges."

The overall comprehensive plan "Atchafalaya Basin Floodway System, Louisiana" has a benefit cost ratio of 16.7 to 1.

State Initiative

As outlined in my Land Use Proposal and the Chief of Engineer's Report, "Atchafalaya Basin Floodway System, Louisiana", the "willing vendor" land acquisition in the Atchafalaya Basin is to be a joint federal-state venture. Negotiations are currently underway with landowners in the Atchafalaya Basin for the acquisition of approximately 58,000 acres of prime bottomland hardwood forest land. The land acquisition is to take place over a three year period.

On June 3, 1983, I announced that I would ask the Louisiana Legislature to appropriate funds to begin the state portion of the Atchafalaya Basin "willing vendor" land acquisition. For Fiscal Year 1983-84, I have asked for $12,000,000 to purchase approximately 10,000 acres of land in the Atchafalaya Basin.

The bottomland hardwood forests, cypress-tupelo swamps and the marshes and wetlands of the United States are enormously important natural systems. However, they are disappearing at an alarming rate. The multipurpose Atchafalaya Basin plan contained in the Report of February 28, 1983, will insure that this unique natural heritage, the Atchafalaya Basin, will not be lost forever to future generations of United States citizens.

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